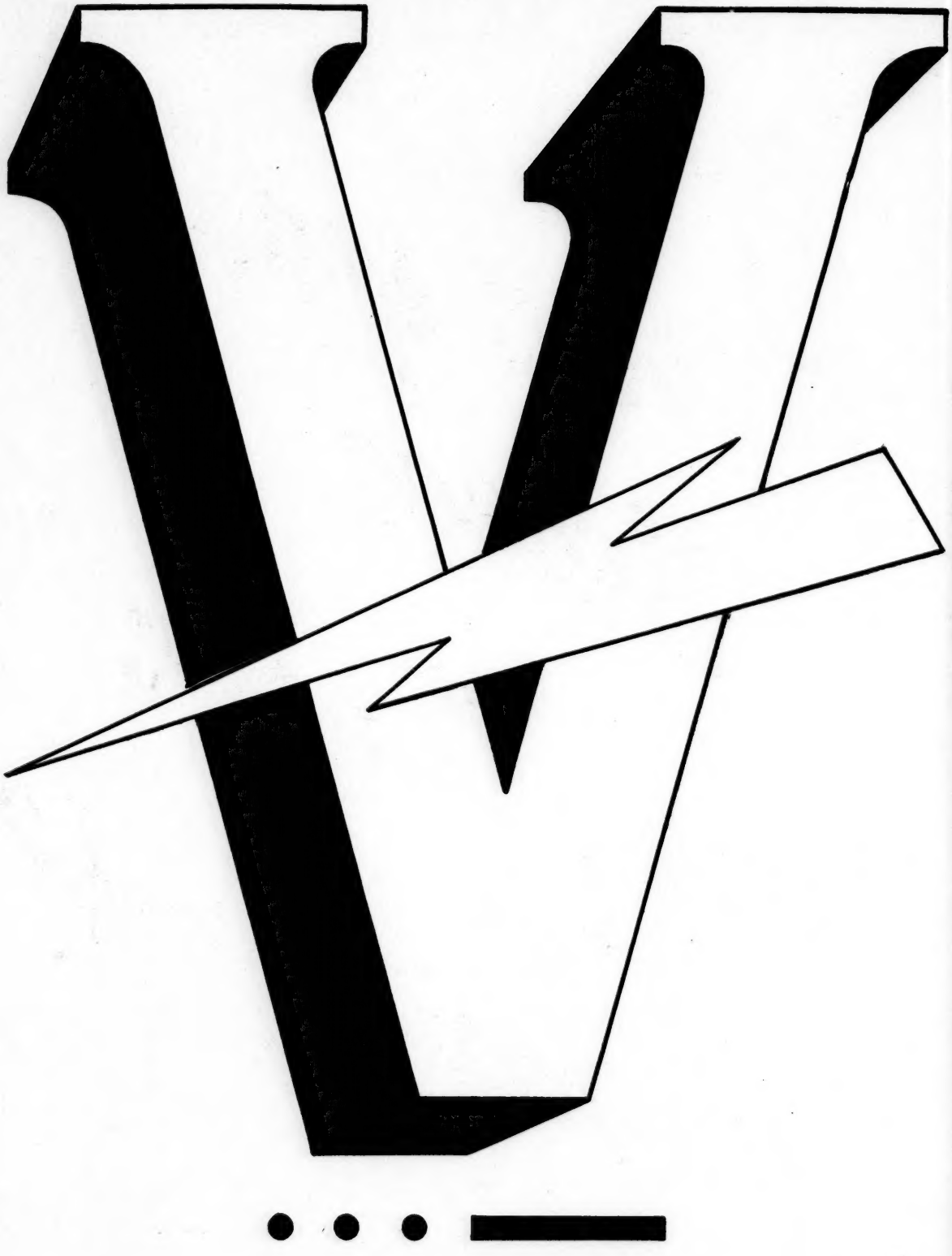
# THE MARINE CORPS GAZETTE

Marines Going Over the Side of a Transport into Landing Boats via Cargo Net. Acme Photograph.

SEPTEMBER, 1941

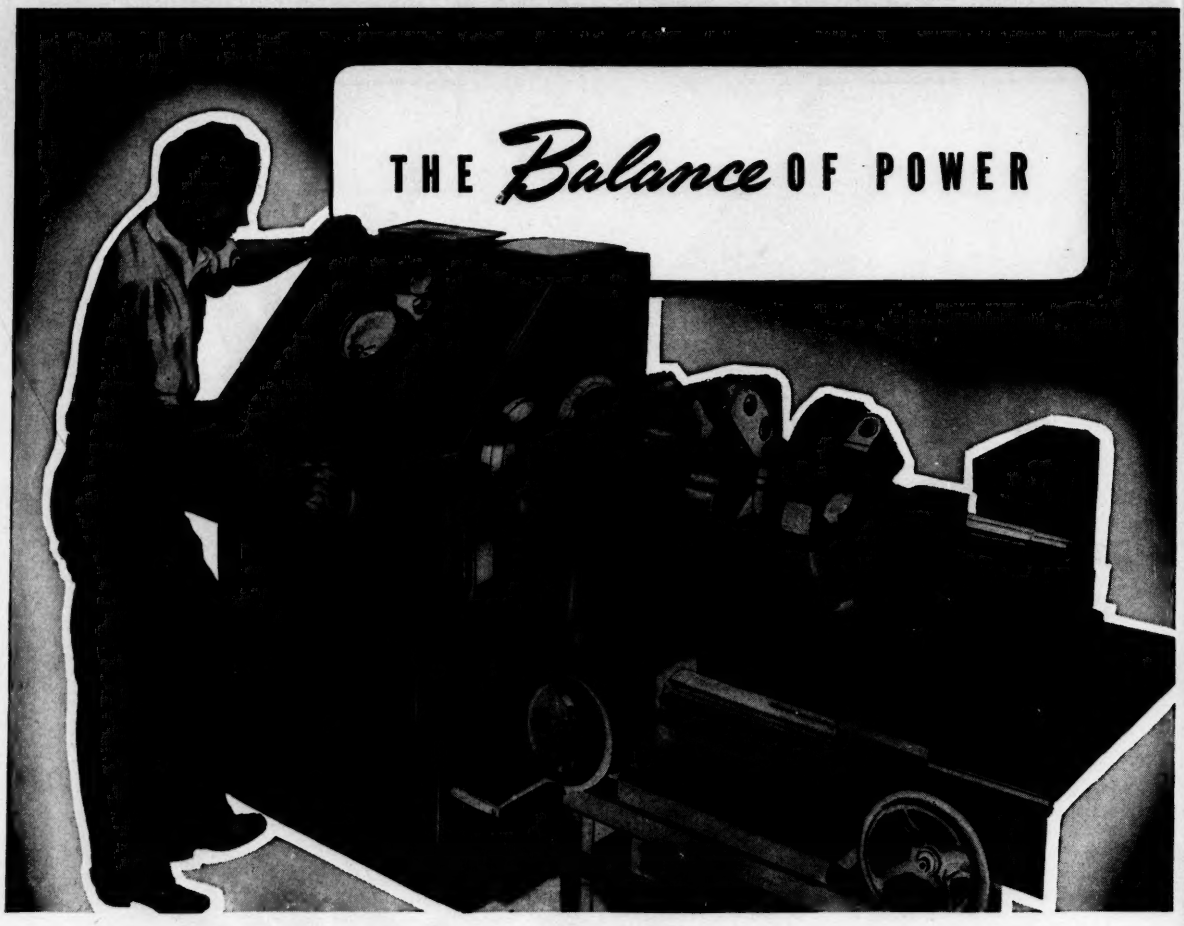
XUM



THE BG CORPORATION
NEW YORK, N. Y.

# Have you seen Gary Cooper in Sergeant York?

a Warner Bros. Picture
—one of the best ever!




AT a rate of 280 impulses per second, the cylinders of the Cyclone 14 aircraft engine deliver 1700 horsepower to the whirling crankshaft. With every revolution of this shaft, 14 sturdy pistons and rods accelerate up to 60 m.p.h. in a distance of 6 inches, then instantly reverse to complete the cycle. Under such conditions, operating smoothness requires the most precise balance of moving parts.

This even flow of power from a Wright engine is assured by checking every individual Wright crankshaft on a Dynetric Balancer. Accurate to the fraction of an ounce, this device determines not only the size of the counterweight required by a crankshaft, but also the exact point of application. With such precision equipment, Wright has maintained an unvarying standard of quality while defense output has increased nearly seven-fold to more than 1,750,000 horsepower a month.

WRIGHT Aircraft ENGINES

WRIGHT AERONAUTICAL CORPORATION • PATERSON, NEW JERSEY

A Division of Curtiss-Wright Corporation

# THE MARINE CORPS GAZETTE

**WASHINGTON, D. C.**

Vol. 25 SEPTEMBER, 1941 No. 3

## CONTENTS

ROYAL MARINES IN CRETE ..... 7

GERMAN TRAFFIC AND MARCH DISCIPLINE ..... 9

CONGRATULATIONS ..... 10

ORGANIZATION FOR GUERRILLA HOSTILITIES IN CHINA (Conclusion) .. 11

"GUNS OR BUTTER?" ..... 13

17,000 MANEUVERING TROOPS STUNNED ..... 14

COMMENDATIONS ..... 15

NOTES ON GERMAN TRAINING IN MARCHING AND MARCH DISCIPLINE 16

THE WHITES OF THEIR EYES ..... 17

DON'T PLAN THESE BATTLES ..... 19

THE MARINES—OLD STYLE ..... 21

ON THE MOBILITY OF BASE DEFENSE ARTILLERY ..... 23

THE MOUNTED EXPEDITION TO MATAGALPA ..... 25

MARINE CORPS SELECTIONS ..... 27

BOOK REVIEW ..... 30

THE SQUAD AUTOMATIC ..... 32

AMERICAN RED CROSS SERVES MEN IN CAMP ..... 40

**Opinions or assertions in the articles are the private ones of the writers, and are not to be construed as official or reflecting the views of the Navy Department or the naval service at large.**

Entered as second-class matter, March 27, 1929, at the Post Office, Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized November 23, 1918.

PATRONIZE OUR ADVERTISERS

XUM

# The Marine Corps Association

ORGANIZED APRIL 25, 1913, AT GUANTANAMO BAY, CUBA


BOARD OF OFFICERS

MAJOR GENERAL THOMAS HOLCOMB, *President*
MAJOR GENERAL HOLLAND M. SMITH, *Vice-President*
LIEUT-COLONEL SHALER LADD, *Secretary-Treasurer*

BOARD OF DIRECTORS

MAJOR-GENERAL C. B. VOGEL, U.S.M.C.
COLONEL A. H. TURNAGE, U.S.M.C.
LIEUT-COLONEL H. B. MILLER, U.S.M.C.R.
LIEUT-COLONEL M. A. EDISON, U.S.M.C
LIEUT-COLONEL J. W. BECKETT, U.S.M.C.
MAJOR WM. N. MCKELVY, U.S.M.C.
CAPTAIN PAUL DRAKE, U.S.M.C.
CAPTAIN HOYT MCMILLAN, U.S.M.C.
COLONEL J. C. FEGAN, U.S.M.C.
COLONEL P. A. DEL VALLE, U.S.M.C.
LIEUT-COLONEL H. C. MAJOR, U.S.M.C.
MAJOR CARLETON PENN, U.S.M.C.R.
MAJOR R. M. CUTTS, U.S.M.C.
MAJOR GLEN P. MCATEE, U.S.M.C.R.
CAPTAIN SAMUEL R. SHAW, U.S.M.C.
1ST LIEUT. ROBERT D. HEINL, JR., U.S.M.C.
CHIEF MARINE GUNNER THOMAS QUIGLEY, U.S.M.C.


**OBJECT OF ASSOCIATION**—"The Association is formed to disseminate knowledge of the military art and science among its members; to provide for the improvement of their professional attainments; to foster the spirit and preserve the traditions of the United States Marine Corps; and to increase the efficiency of its members."—Section 2, Article 1, of the Constitution.

**CONDITIONS OF MEMBERSHIP**—Active membership open to officers of the United States Marine Corps and Marine Corps Reserve and to former officers of honorable service with annual dues of $3.00. Associate membership, with annual dues of $3.00, open to officers of the Army, Navy and Organized Militia and to those in civil life who are interested in the aims of the Association. Honorary members shall be elected by unanimous vote of the Board of Officers.

Associate membership, with annual dues of $3.00, including yearly subscription to THE MARINE CORPS GAZETTE, open to enlisted men of the Marine Corps of the first pay grade.

**CONTRIBUTIONS**—The GAZETTE desires articles on any subject of interest to the Marine Corps. Articles accepted will be paid for at the GAZETTE'S authorized rates. Non-members of the Association as well as members may submit articles. In accepting articles for publication, the GAZETTE reserves the right to revise or rearrange articles where necessary.

All communications for the Marine Corps Association and THE MARINE CORPS GAZETTE should be addressed to the Secretary-Treasurer, Marine Corps Association, Headquarters, U. S. Marine Corps, Washington. Checks for payment of dues should be made payable to the Secretary-Treasurer.

---


## THE MARINE CORPS GAZETTE

LIEUT-COLONEL SHALER LADD, U.S.M.C., *Editor*
MAJOR R. MCC. PATE, U.S.M.C., *Asst. Editor*

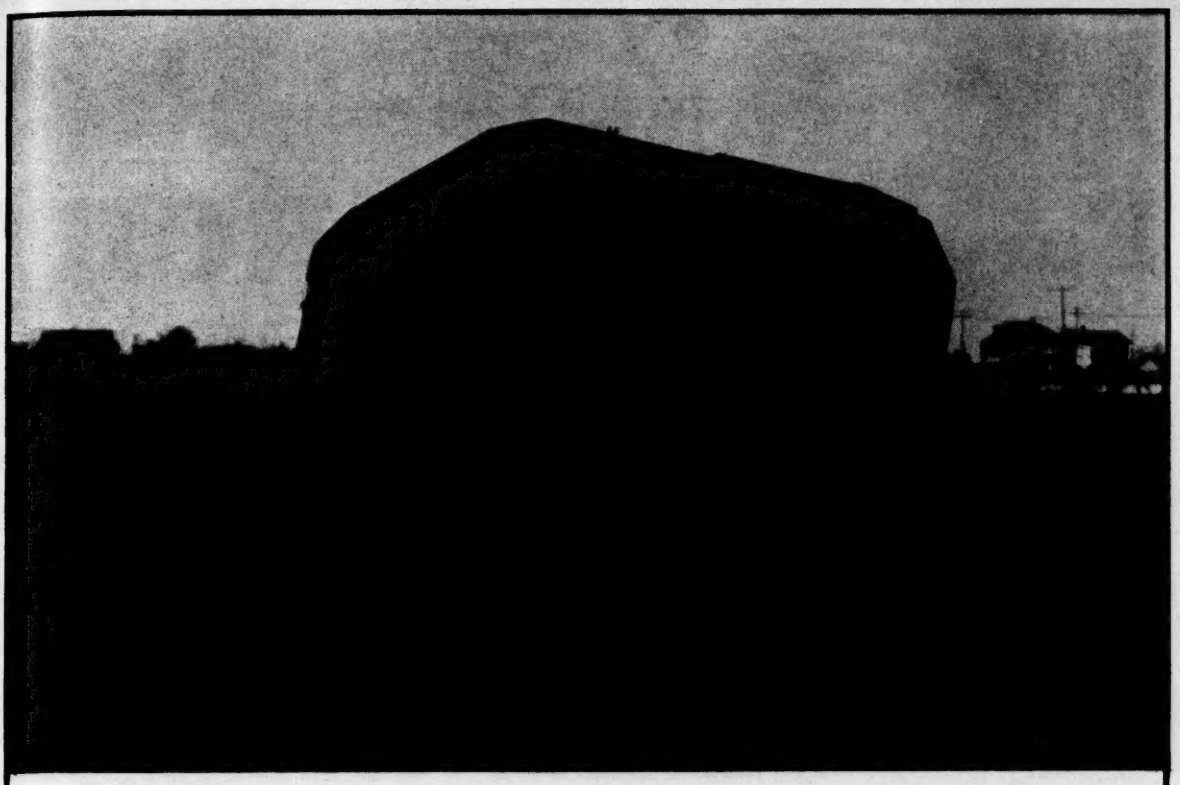
Published Quarterly By

## THE MARINE CORPS ASSOCIATION

Room 1734 Headquarters U. S. Marine Corps, Washington, D. C.
Printed at 32nd St. & Elm Ave., Baltimore, Md.



Authors are responsible for all statements contained in articles published in this magazine.



# MILITARY VEHICLES

## *OF ALL TYPES*

**Combat Tanks . . . Armored Cars**
**Scout Cars . . . Reconnaissance Cars**
**Officers Cars . . . Ambulances**
**Mobile Machine Shops**
**Artillery Tractors** *for Guns of All Sizes*
**High Speed Track Laying Artillery Tractors**
**Captive Balloon Winches**
**Air Field Service Tractors**
**Airplane Crash Trucks . . . Fire Equipment**
**Airplane Wrecking Trucks**
**Mobile Aircraft Machine Shops**
**Mobile Oxygen Generator Units**
**Mobile Water Purification Units**
**Air Field Rotary Snow Removal Equipment**
**Air Field Fuel Servicing Trucks**

*We are Specialists in the Design and Production of Military Transportation Equipment*

# MARMON-HERRINGTON CO., INC.

*MANUFACTURERS OF ALL-WHEEL-DRIVE VEHICLES AND HIGH SPEED TRACK LAYING VEHICLES*

**INDIANAPOLIS, INDIANA, U. S. A.**

*Purveyors to U. S. Marine Corps, U. S. Navy, U. S. Army and Many Foreign Governments*



XUM

★ ★ ★ ★ ★ ★ ★ ★

# Forward . . . MARCH!

HERE'S a machine that's a whole labor battalion in itself—a brawny dirt-mover that executes commands at the double.

Hard-baked earth in front of the 'dozer blade doesn't stop a "Caterpillar" Diesel Tractor—any more than knee-deep gumbo. Its tremendous traction results from a combination of rugged power, scientifically placed weight, and long, broad tracks with deep-biting steel grousers. When that tractive force takes hold, the load moves!

The Army is finding plenty of tough jobs for "Caterpillar" Diesel Tractors, in these days of all-out defense effort. Their usefulness is increased by their simplicity of operation and the ease with which they can be maneuvered. And even more important is the solid, durable "Caterpillar" construction that stands up to a 24-hour day's work without lay-offs or breakdowns.

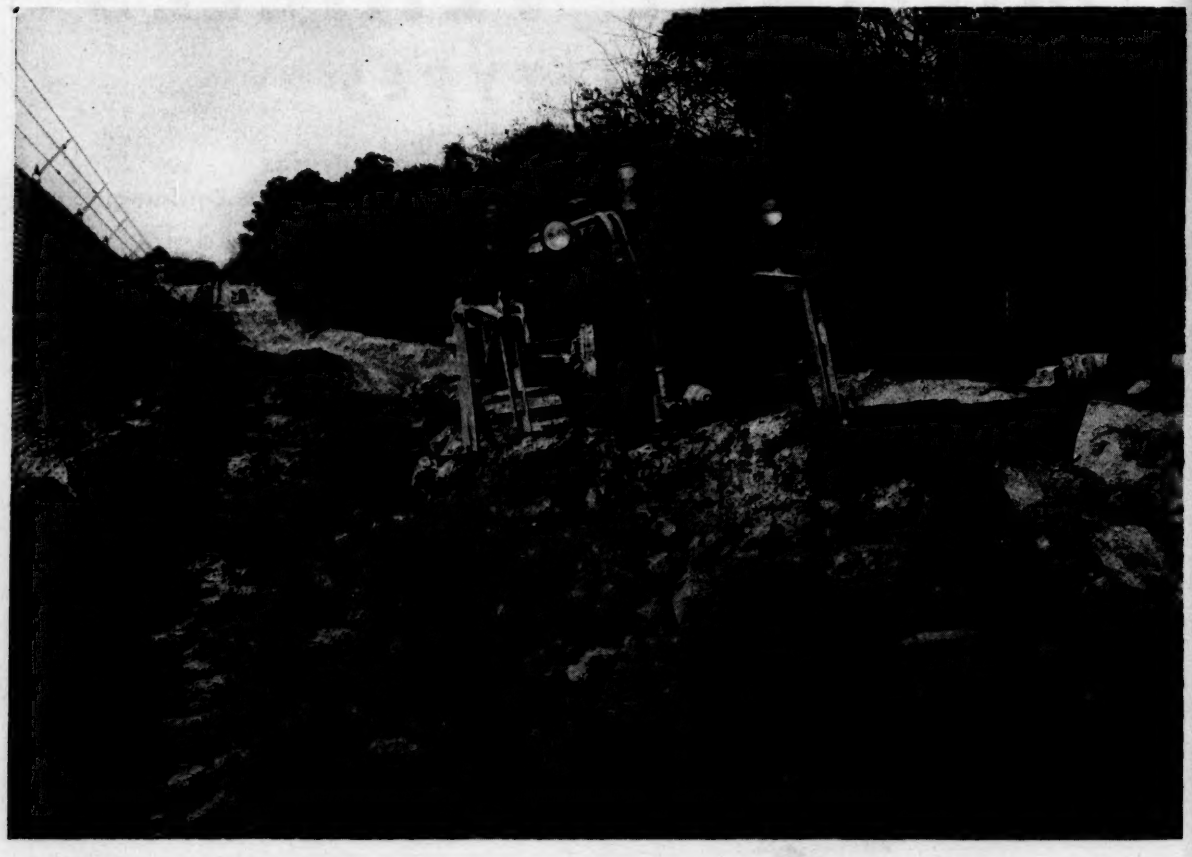
There is hardly a defense project in the country—airport, cantonment or naval base—where "Caterpillar" Diesel Tractors, Engines and Motor Graders aren't shouldering a major share of the heavy work.

CATERPILLAR TRACTOR CO., PEORIA, ILLINOIS

CATERPILLAR DIESEL

REG. U.S. PAT. OFF.

ENGINES AND ELECTRIC SETS • TRACK-TYPE TRACTORS • ROAD MACHINERY



THE MARINE CORPS GAZETTE

Vol. 25 SEPTEMBER, 1941 No. 3

# Royal Marines in Crete

CARDED

*Contributed by* BRIGADIER-GENERAL JULIAN C. SMITH, *U. S. Marine Corps*

**The Attack on Suda Bay**

BEFORE dealing with the evacuation of Crete it might be of interest to recall some of the events in the war in which the Royal Marines have participated.

Apart from their most important function, that of forming part of the complement of H. M. Ships, Royal Marines have had experience of a varied nature on shore. *Iceland and the Faroes* were first occupied by Marines in April and May, 1940. During the campaign in *Norway* forces were landed at various points on the coast, notably at Andalsnes and Namsos. A company of Marines was landed at the *Hook of Holland* in May 1940 to cover the withdrawal of other troops and R.N. demolition parties with whom they re-embarked Small forces were sent to *Boulogne* and *Calais* with a similar object in view. Only at Calais where all three officers and 62 of the total of 82 all ranks sent failed to return, were losses heavy in proportion to the numbers despatched.

In *Crete*, however, it is a matter for regret that nearly 1,100 out of the 2,000 all ranks landed, have failed to return. The sacrifice, however, was not altogether in vain, since it appears, from accounts received, that had it not been for the resolute fighting of the Australian and Royal Marine rearguard, the total losses of the garrison would have been heavier.

The Royal Marine Forces in Crete consisted of heavy and light Anti-Aircraft batteries, a searchlight battery and coast defense batteries for the defense of the naval base at Suda Bay and the aerodromes at Maleme and Heraklion. A signal company 200 strong also landed. Although specialist units, each man had his rifle, since it is customary in the Corps that the basic training should be that of infantry, and this includes training in the use of the rifle and bayonet. They were not, however, in the first instance organized infantry battalions.

After the main attack broke on the 20th May the Search-

light Battery in the Suda Bay area was organized as an infantry battalion and put into the line South of Canea. The areas in which these troops were holding positions were in olive groves with small fields of fire, and the shortage of wire and digging tools had not enabled proper position to be prepared. It is difficult to portray the situation at this period, when there was a complete absence of our own air support and formations of German bombers and fighters kept up a continuous circuit and "blitztag" of the front and back areas, flying very low.

By day, no movement of any sort was possible. Motor transport and despatch riders were immediately shot up and any area which showed any activity was immediately "straffed." Communications were difficult to maintain and all supplies had to be delivered to units by night. Two platoons of Royal Marines improvised from signallers and searchlight crews gallantly led by Captain A. L. Laxton, Royal Marines, distinguished themselves on this day by driving a large force of parachute troops out of a 3.7-inch gun position south of Canea which had been captured by the enemy. Captain Laxton was himself badly wounded in this attack.

Some of these small local actions required great courage and leadership as in all cases the Germans were armed with Tommy guns, hand grenades and mortars and when once having taken up a defensive position were very difficult to dislodge especially by troops armed only with a rifle.

The A.A. Batteries, like those of the Army, were heavily straffed by low-flying aircraft during the whole attack and suffered corresponding casualties. The guns were in action in improvised sites up to the moment of withdrawal.

At Maleme, where airborne troops landed close to the A.A. Batteries and drove the gun's crews from the guns, these crews remained to fight as infantry soldiers for the rest of the day and until they retired, when the position was evacuated.

At Heraklion, where there were some light and heavy A.A. Batteries, in the preliminary stages these guns had great success in shooting down German fighters and troop carriers. Later when parachutists in large numbers were dropped near and in the gun positions, the detachments had to man their rifles and succeeded in killing large numbers whilst still in the air.

One Royal Marine manning a Lewis gun himself brought down two aircraft and killed many parachutists even before they reached the ground. The closeness of the fighting can be judged by the fact that the Royal Marine Officer commanding this battery shot two Germans with his revolver.

In this area it is estimated that at least 2,000 parachute troops were definitely killed on the first day of the attack. In the later stages German reinforcements were dropped outside the main defenses and in one case surrounded an Australian patrol, who nevertheless fought their way back with the bayonet and brought in a large number of prisoners.

All these A.A. positions at Heraklion were successfully held until the 28th May when all the troops totalling 4,000 were evacuated by sea. During this period the enemy repeatedly attacked our positions both by air and from the ground and on several occasions the Royal Marine A.A. guns were used in a direct fire role against ground troops.

When the line broke in the Canea sector on the 26th May, the Royal Marine searchlight Battalion near Mournies was the last battalion to remain in the line and marched out in good order. Thereafter for the time being the credit for the rearguard action belongs to the New Zealand and Australian units who fought throughout with the greatest determination and success.

The outstanding incident in the Suda area at this time was a counter attack at 1130 hours on the 27th May ending in a bayonet charge by Australian and Maori Battalions which drove the Germans back 1,000 yards and enabled other troops of the rearguard to disengage. It was not until Thursday, 29th May that reinforcements were required for the rearguard and a Royal Marine Battalion was organized from the remaining units and brought in the line.

The enemy made a determined attack on the rearguard south of Imvros on the 30th May. Their advanced parties were brought under fire from several forward positions well in advance of the main rearguard position and this still further delayed the enemy.

A company of Royal Marines under Lieutenant T. W. Retter, was detached from the main rearguard to prevent the Germans working round the right flank of the main position. The quick deployment of this company frustrated the threat from this flank and caused many casualties. Contact with the main rearguard position was again made by the enemy later in the day, when a further attack was not pressed. From then onwards the Royal Marine Battalion were in contact with the enemy and, with the Australian Infantry Battalion, who had been in action throughout the rearguard operations, were the last to retire from the hills overlooking the beaches.

When the final order to withdraw to the beaches was given the Royal Marine Battalion was still under heavy machine gun fire. Only twenty minutes' notice was given to withdraw. In order to distract the enemy's attention to enable the main party to disengage from the action a diversion was created by throwing grenades down a ravine in which it was known a force of the enemy had infiltrated. These grenades were set so that the full length of the fuse was used and the grenades exploded amongst the enemy force down in the ravine. Long range fire was also used to keep the enemy at a distance. This enabled the whole of the Battalion to disengage and carry out the withdrawal according to plan.

The terrain over which this rearguard fought was alpine in the extreme and ill-suited for evacuation. There was only one road which dropped from the top of the mountains about 2,000 feet high to a narrow plain below in a series of acute hairpins, the lower half of the road being unfinished and covered with loose road metal, coming to an abrupt end on the hillside about 500 feet above sea level. The plain below was of the roughest scrub and limestone crossed only by a few ill-defined tracks. The supply of rations and water to the rearguard was of

(*Continued on page* 64)

CARDED

# German Traffic and March Discipline

MILITARY INTELLIGENCE DIVISION, WAR DEPARTMENT

**Based upon a translation which appeared in the *Militar Wochenblatt*, authoritative German military publication, on February 21, 1941**

ALTHOUGH a great deal of the activity of troops consists of marching, it is not feasible to establish many uniform and invariable rules because marching is done under so many different conditions. This fact is taken into consideration by our field service regulations, which state that when march orders are issued, one question is of decisive importance: Is ground contact with the enemy to be expected or not? If so, tactical demands regarding organization, succession, and halts in marching receive first consideration, and desire to spare troops is subjected to these. If there are no prospects for ground contact with the enemy, regulations prescribe that first consideration be shown troops, which march in small formations, preferably separated according to arms. These general principles also hold good for creation and protection of billets.

March discipline and traffic discipline have much in common. Although they overlap each other in part, traffic discipline, which is applicable to numerous vehicles of all descriptions, as well as to troops, goes beyond march discipline in many ways. Mechanization and motorization of considerable parts of the army have increased the importance of street and road nets, not only for combat troops, but for rearward services. The demand for supplies of all kinds—ammunition, food, fuel, and many other things—has increased considerably, and traffic discipline is necessary if the demand is to be met.

No troop or vehicle should use the road longer than necessary for moving forward—that is to say, in cases of lining up, halting, moving into billets, or breaking down, the first task is to have the road completely cleared at once. Let us look at a number of cases in detail; these instructions may seem easier to carry out than they actually are.

Even the formation of a marching column sometimes involves considerable difficulty. In no case should the column be formed on the main road. Side roads, by-ways, and sometimes even the terrain along main roads can be utilized. In order to assure lining up of units in time, the simplest system is to send leaders ahead and have them maintain connection with their troops by signals or motorcyclists.

Lighter vehicles, as well as troops marching on foot, may almost always be taken off the road with some dexterity. If heavy cars have to stop on the road itself, however, especially broad spots should be selected for halts, and operators should drive as sharply as possible to the right. Roads have frequently become blocked when columns of some length stopped suddenly and vehicles in the rear were unable to turn to the right along the roadside It is advisable, therefore, to use signals or commands well in advance for advising vehicles in the rear of intention to halt. For such purposes there are mounted sergeants for horse units and motorcycle orderlies for motorized troops.

A troop which has to stop on the road must stop for only a short time, and it must move at once to the extreme right side of the road. Arms are to be stacked by the side of the road as the troop leaves and rests at one side only—preferably to the right. Space is gained if single vehicles close up so that the left side of the road is totally clear, and field kitchens and other vehicles are not permitted to block the left by driving ahead. Care should be exercised in the selection of convenient spots for such vehicles close to the border of the road.

It may happen that a single vehicle will foolishly halt on the left and stop traffic from the opposite direction. In such a case, officers and men should not stand around without taking action, for it is the duty of men of every rank to take the initiative in maintaining order. When this goal has been attained, blocking of roads may be nipped in the bud and not allowed to grow to greater or more dangerous proportions.

Timely and careful reconnaissance of rest places is of great importance for traffic discipline, and each unit must understand that the road serves many units besides itself. Since individual circumstances dictate what formation will be ordered for resting, general directions cannot be given in advance.

Only the question of water supply is of decisive importance, but it concerns all arms of the service except motorized units; an infantry regiment with about 650 horses is no less dependent upon water supply than artillery is. In sparsely settled districts it will be advisable—tactical circumstances permitting—to organize rests for the same location, with successive troop units rotating. To regulate the rest according to time alone will be of little advantage, for it may happen that units having the largest number of horses stop at places where there is no water. The question of providing good watering facilities, therefore, must be carefully considered by officers with experience in this matter, for abundant watering is necessary for keeping horses in good health and condition.

The smooth movement of troops from main march roads into villages on or near these roads must be given consideration, and arrangements must be made in advance. The troop must never stop and wait on the main road itself. If it takes time, as it often will, to prepare and announce billets, the troop must take to a by-road, a farm, a vacant spot or, if it comes to the worst, the field, in order to keep the main road clear for other traffic.

Difficulty is caused when one column overtakes another, and clogging of the road may result. At times it is necessary for one column to pass another, but if two columns

(*Continued on page 64*)

# CONGRATULATIONS

## UPON THEIR SELECTION TO BE MAJOR GENERALS

### BRIGADIER GENERAL ROSS E. ROWELL

Born September 24, 1884, in Ruthven, Iowa. Usual residence, Coronado, California. Graduate of Iowa State College.

Appointed a Second Lieutenant in the Marine Corps August 27, 1906, and promoted to present rank of Brigadier General October 1, 1939. Is at present on duty in the Office of Naval Intelligence, Navy Department, Washington, D. C.

Served on foreign duty in Cuba, Philippine Islands, Nicaragua, Haiti and France, and has but recently returned from a tour of duty as observer in Asia, Europe and Africa. Has been in aviation continuously since 1923, and from 1935 to 1939 was Director of Marine Corps Aviation at Marine Corps Headquarters in Washington.

For extraordinary heroism and exceptionally meritorious service while in command of the Aircraft Squadrons in Nicaragua in 1927 and 1928, he was awarded the Distinguished Flying Cross and the Distinguished Service Medal, anl received a special letter of commendation from the Secretary of the Navy. Was also decorated by the President of Nicaragua with the Nicaraguan Distinguished Service Medal, the Medal of Merit, and the Medal of Distinction.

In 1939 and 1940 he served as Naval Attache and Naval Attache for Air at the American Embassy, Havana, Cuba, and in the same capacities at the American Legation, Ciudad Trujillo, Dominican Republic. From June, 1940, to April, 1941, was in command of the Marine Aircraft Wing, Fleet Marine Force, San Diego, Calif., and was then ordered to the American Embassy, London, England, for duty as Assistant Naval Attache and Observer.

He is a graduate of the Advanced Air Service School, Kelly Field, and of the Air Corps Tactical School, Langley Fied, Va.

In addition to the decorations mentioned above, General Rowell holds the following:

Cuban Pacification Medal
Victory Medal with West Indies Clasp
Marine Corps Expeditionary Medal with 2 bronze stars
Second Nicaraguan Campaign Medal

### BRIGADIER GENERAL PHILIP H. TORREY

Born July 18, 1884, at Fort Douglas, Utah. Usual residence, Washington, D. C. Is at present in command of the First Marine Division, Fleet Marine Force, Marine Barracks, Quantico, Va.

Appointed a Second Lieutenant in the Marine Corps, July 18, 1905, from civil life, and was promoted to his present rank of Brigadier General August 21, 1939.

Served on foreign duty in Cuba and Haiti, and in the early part of 1918 was ordered to Europe for the purpose of obtaining information regarding training, equipment, etc., of troops in the war zone. On his return, was assigned as Officer in Charge of the Overseas Depot at Quantico, Va.

Has served at sea and at various posts and stations in the United States. Commanded Marine Barracks, Annapolis, Md., from 1926 to 1929; the Sixth Marines, Fleet Marine Force, from 1935 to 1937; and was Officer in Charge of the Eastern Recruiting Division, Philadelphia, Pa., in 1938 and 1939. From August, 1939, to January, 1941, he served as Commandant of the Marine Corps Schools at Quantico, Va., and since the latter date has been on duty with the Fleet Marine Force.

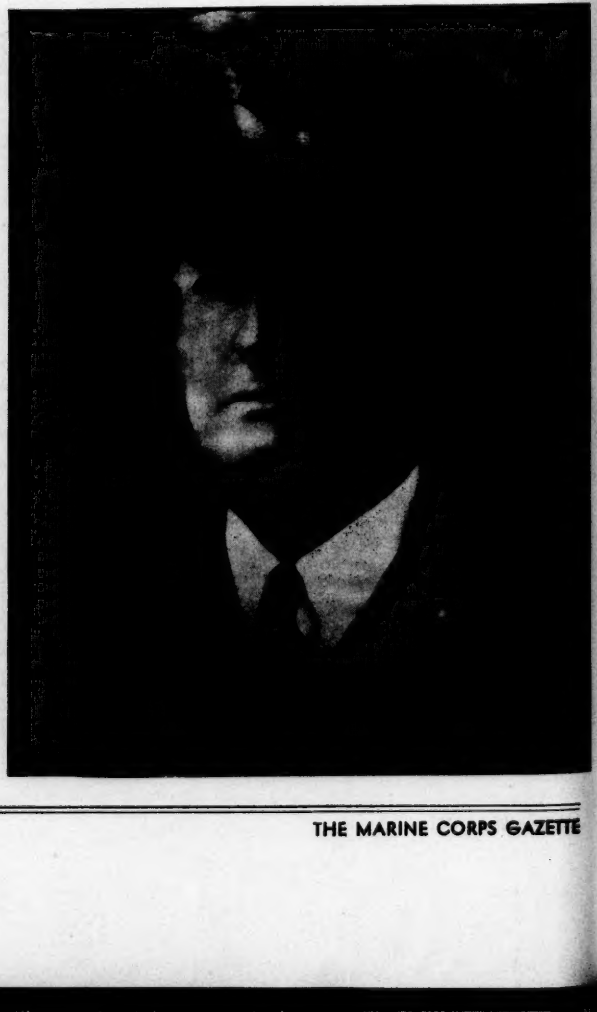
General Torrey is a graduate of the Naval War College, both Senior and Advanced Courses, and of the Field Officers' Course, Marine Corps Schools.

He holds the following medals:

Cuban Campaign Medal

Victory Medal

Marine Corps Expeditionary Medal with 1 bronze star



# Organization for Guerrilla Hostilities in China

By Captain S. B. Griffith, *U.S.M.C.*

*(Continued from June Issue)*

PART FIVE

Organization for Guerrilla Hostilities

FOUR points must be considered under this subject. These are:

1. How are guerrilla bands formed?
2. How are guerrilla bands organized?
3. The methods of arming guerrilla bands.
4. What elements constitute a guerrilla band?

These are all questions pertaining to the organization of armed guerrilla units; they are questions which those who have had no experience in guerrilla hostilities do not understand and on which they can arrive at no sound decisions; indeed, they would not know in what manner to begin. First: How are guerrilla units originally formed? The unit may originate in any one of the following ways:

(a) From the masses of the people.
(b) From regular army units temporarily detailed for for the purpose.
(c) From regular army units permanently detailed.
(d) From the combination of a regular army unit and a unit recruited from the people.
(e) From the local militia.
(f) From deserters from the ranks of the enemy.
(g) From former bandits and bandit groups.

In the present hostilities no doubt all these sources will be employed.

In the first case above the guerrilla unit is formed from the people. This is the fundamental type. Upon the arrival of the enemy army to oppress and slaughter the people their leaders call upon them to resist. They assemble the most valorous elements, arm them with old rifles or bird guns and thus a guerrilla unit begins. Orders have already been issued throughout the nation which call upon the people to form guerrilla units both for local defense and for other combat. If the local governments approve and aid such movements they can not fail to prosper. In some places where the local government is not determined or where its officers have all fled, the leaders among the masses (relying on the sympathy of the people and their sincere desires to resist Japan and succor the country) call upon the people to resist and they respond. Thus many guerrilla units are organized. In circumstances of this kind the duties of leadership usually fall upon the shoulders of young students, teachers, professors, other educators, local soldiery, professional men, artisans and those without a fixed profession who are willing to exert themselves to the last drop of their blood. Recently in Shansi, Hopei, Chahar, Suiyuan, Shantung, Chekiang, Anhui, Kiangsu, and other provinces extensive guerrilla hostilities have broken out. All of these are organized and led by patriots. The amount of such activity is the best proof of the foregoing statement. The more such bands there are, the better will the situation be. Each district, each country, should be able to organize a great number of guerrilla squads which when assembled form a guerrilla company. There are those who say: "I am a farmer or I am a student"; "I can discuss literature but not military arts." This is incorrect. There is no profound difference between the farmer and the soldier. You must have courage. You simply leave your farms and become soldiers. That you are farmers is of no difference and if you have education that is so much the better. When you take your arms in hand you become soldiers; when you are organized you become military units. Guerrilla hostilities are the university of war and after you have fought several times valiantly and aggressively you may become a leader of troops and there will be many well known regular soldiers who will not be your peers. Without question the fountain head of guerrilla warfare is in the masses of the people who organize guerrilla units driectly from themselves.

The second type of guerrilla unit is that which is organized from small units of the regular forces temporarily detached for the purpose. For example, since hostilities commenced many groups have been temporarily detached from armies, divisions and brigades and assigned guerrilla duties. A regiment of the regular army may, if circumstances warrant, be dispersed into groups for the purpose of carrying on guerrilla operations.

As an example of this there is the 8th Route Army in North China. Excluding the periods when it carries on mobile operations as an army it is divided into its elements and these carry on guerrilla hostilities. This type of guerrilla unit is essential for two reasons. First, in mobile warfare situations the coordination of guerrilla activities with regular operations is necessary. Second, until guerrilla hostilities can be developed on a grand scale there is no one to carry out guerrilla missions but regulars. Historical experiences shows us that regular army units are not able to undergo the hardships of guerrilla campaigning over long periods. The leaders of regular units engaged in guerrilla operations must be extremely adaptable. They must study the methods of guerrilla war. They must understand the initiative, dis-

cipline, and the employment of stratagems are all of the utmost importance. As the guerrilla status of regular units is but temporary their leaders must lend all possible support to the organization of guerrilla units from among the people. These units must be so disciplined that they will hold together after the departure of the regulars.

The third type of unit consists of a detachment of regulars who are permanently assigned to guerrilla duties. This type of small detachment does not have to be prepared to rejoin the regular forces. Its post is somewhere in the rear of the enemy and there it becomes the backbone of guerrilla organization. As a nexample of this type of organization we may take the Wu T'ai Shan district in the heart of the Hopei Chahar-Shansi area. Along the borders of these provinces units from the 8th Route Army have established a framework for guerrilla operations. Around these small cores many detachments have been organized and the area of guerrilla activity greatly expanded. In areas in which there is a possibility of cutting the enemy's lines of supply this system should be used. Severing enemy supply routes destroys his life line and is one feature that can not be neglected. If at the time of withdrawal of the regular forces from a certain area some units are left behind these should conduct guerrilla operations in the enemy's rear. As an example of this we have the guerrilla bands now continuing their independent operations in the Shanghai-Woo Sung area in spite of the withdrawal of regular forces.

The fourth type of organization is the result of a merger between small regular detachments and local guerrilla units. The regular forces may despatch a squad, a platoon, or a company, which is placed at the disposal of the local guerrilla commander. If a small group experienced in military and political affairs is sent it becomes the core of the local guerrilla unit. These several methods are all excellent and if properly applied the intensity of guerrilla warfare can be extended. In the Wu T'ai Shan area each of these methods has been used.

The fifth type mentioned above is formed from the local militia, from police and home guards. In every North China province there are now many of these groups and they should be formed in every locality. The government has issued a mandate to the effect that the people are not to depart from war areas. The officer in command of the country, the commander of the Peace Preservation Unit, the Chief of Police are all required to obey this mandate. They can not retreat with their forces but must remain at their stations and resist.

The sixth type of unit is that organized from troops that come over from the enemy—the Chinese "traitor troops" employed by the Japanese. It is continually possible to produce dissafection in their ranks and we must increase our propaganda efforts and foment mutinies among such troops. Immediately after mutinying they must be received into our ranks and organized. The concord of the leaders and the assent of the men must be gained and the units rebuilt politically and re-organized militarily. This having been accomplished they become successful guerrilla units. In regard to this type of unit it may be said that political work among them is of the utmost importance.

The seventh type of guerrilla organization is that formed from bands of bandits and brigands. This, although difficult, must be carried out with utmost vigor lest the enemy use such bands to his own advantage. Many bandit groups pose as anti-Japanese guerrillas and it is only necessary to correct their political beliefs to convert them.

In spite of inescapable differences in the fundamental types of guerrilla bands it is possible to unite them to form a vast sea of guerrillas. The ancients said "T'ai Shan is a great mountain because it does not scorn the merest handful of dirt; the rivers and seas are deep because they absorb the waters of small streams." Attention paid to the enlistment and organization of guerrillas of every type and from every source will increase the potentialities of guerrilla action in the anti-Japanese war. This is something that patriots will not neglect.

### The Method of Organizing Guerrilla Regimes

Many of those who decide to participate in guerrilla activities do not know the methods of organization. For such people, as well as for students who have no knowledge of military affairs the matter of organization is a problem that requires solution. Even among those who have military knowledge there are some who know nothing of guerrilla regimes because they are lacking in that particular type of experience. The subject of the organization of such regimes is not confined to the organization of specific units but includes all guerrilla activities within the area where the regime functions.

As an example of such organization we may take a geographical area in the enemy's rear. This area may comprise many counties. It must be subdivided and individual companies or battalions formed to accord with the subdivisions. To this "military area" a military commander and political commissioners are appointed. Under these the necessary officers, both military and political, are appointed. In the military headquarters there will be the staff, the aides, the supply officers, and the medical personnel. These are controlled by the chief of staff who acts in accordance with orders from the commander. In the political headquarters there are bureaus of propaganda organization, people's mass movements and miscellaneous affairs. Control of these is vested in the political chairman.

The military areas are subdivided into smaller districts in accordance with local geography, the enemy situation locally, and the state of guerrilla development. Each of these smaller divisions within the area is a district, each of which may consist of from two to six counties. To each district a military commander and several political commissioners are appointed. Under their direction military and political headquarters are organized. Tasks are assigned in accordance with the number of guerrilla troops available. While the names of the offices in the "district" correspond to those in the larger "area," the number of functionaries assigned in the former case should be reduced to the least possible. In order to unify control, to handle guerrilla troops that come from different sources and to harmonize military operations and local political affairs a committee of from seven to nine mem-

(*Continued on page* 53)

# "GUNS OR BUTTER?"

By 1st Lieutenant R. D. Heinl, Jr., *U. S. Marine Corps*

*"The Soldier can do in war only what he learns in peace . . . In the German Army, soldiers are practically never used for fatigue work. Everything not connected with training is done by civilians. We have time, therefore, to train soldiers for their most important work — battle."* — Anton Freiherr von Bechtolsheim, *Operation Officer, German Sixth Army.*

THE foregoing quotation from a notable address by a foreign officer clearly declares the single aim of all military training, and as clearly dismisses every activity which conflicts with or impedes accomplishment of that aim. Success in battle is the aim; and no peacetime activity should be sanctioned unless it schools the soldier for conflict and victory.

"Reducing the overhead" is by no means a new problem, nor has the Marine Corps entirely failed in this respect. The Fleet Marine Force is perhaps our best expedient for separating guard and service components from those destined for combat, and the success of the FMF as a purely military force with well-directed missions and training supports the initial thesis. Under emergency conditions, we have gone farther: the preeminent demands of an expanding combatant component have forced all guard and service establishments (principally the various Marine Barracks) to curtail their work and to yield every possible man to "the big battalions." This is as it should be. And yet, in the face of a shortage of trained officers and noncommissioned officers, one source appears to remain untapped: the Post Exchange.

Every post exchange in the Marine Corps requires at least the part-time services of one commissioned officer, the full services of both noncommissioned officers and other enlisted personnel, and the close supervision of an organization council and designated personnel of the Adjutant and Inspector's Department. The benefits derived from this system cannot be questioned. The command as a whole benefits through the Recreation Fund, and, for exchange employees, themselves, the additional pay is more than welcome. In view of the effect upon morale of a well-administered exchange, it cannot be denied that the care and attention of an individual officer and of the higher echelons (in council and Marine Corps Headquarters) make for well-administered exchanges, which, particularly under peacetime necessity for maintenance of comfort and morale, in turn help the command. Economy, too, is another advantage of employing Marine Corps personnel, many of them to perform full-time duties on what is essentially part-time pay: i.e., with the bulk of compensation coming in the form of their Government salary, and post exchange pay—when paid—as a sort of additional honorarium. Thus, in peace, there develops what is virtually a separate department of the Marine Corps composed of stewards, accountants, book-keepers and attendants—and, in some cases, of officers, who, by reason of special abilities and reputation, find themselves "slated" for the exchange in every command which they reach.

But the demands of war are not for adept accountants nor punctilious merchants. The engrossing and exacting science of war demands long and single-minded apprenticeship. The entire efforts of every officer, every Marine and every command, particularly in these times are none too great. May it not, therefore, be a false economy which diverts professional military men from their single study in order to direct the commerce of a post exchange?

It may reasonably be answered that much post exchange work is essentially an out-of-hours matter. This is true. On the other hand, any enterprise in which exists so rigorous a personal accountability, regardless of time consumed, is certain to occupy a leading role in any individual's thought and activities. And why should not the same hours spent over a ledger be equally well devoted to training or professional studies?

To abolish our system of post exchanges would be impossible and entirely undesirable. To revise it, might benefit the Corps. The Army, in recent months, has already undertaken such revisions that no officer or enlisted man is directly involved in the conduct of exchange affairs, although supervision continues to vest in appropriate instrumentalities of commanding officers. It is in line with this policy that the following changes in our present system are proposed:

(a) At all Marine Barracks and in such other commands as may appear appropriate, replace exchange personnel (including officers) by bonded civilian employees (possibly retired or invalid Marines) under direction of a salaried exchange-manager to carry on business in accordance with policies prescribed by an organization council. Audits and inventories might still continue under the council.

(b) Let all exchange supervision now conducted within the Adjutant and Inspector's Department be performed by civilian personnel only.

(c) For commands serving in the field (such as Fleet Marine Force components, etc.), let organization exchanges operate substantially as they now do, but with this modification: that personnel of combatant units shall in no case serve in exchanges and that maintenance of *all* field exchanges shall be a function of force service troops (possibly from the Quartermaster's Department) set aside for such duty.

(d) That no Marine detailed to duty in any exchange, whether field or post, be serving in his first enlistment. The effect of this proposal may be considered separately from the foregoing three, since, even should they not be

*(Continued on page 52)*

# 17,000 Maneuvering Troops Stunned

By Robert N. Davis and Carroll Peeke

*Courtesy of the Times-Herald, Washington, D. C.,* July 30, 1941

FORTY tough and heavily armed young gentlemen of the Marine Corps almost disrupted the maneuvers of some 17,000 soldiers of the Forty-fourth Division, as they staged a surprise parachute attack on a military airport in the Army's new Caroline county maneuver area near Fredericksburg, Va., yesterday.

Dropping from the skies in three groups of 10, 10 and 20 men, the Marines landed safely while the soldiers looked up in amazement at the unexpected touch of blitz warfare. It was the first major use of chute troops in U. S. maneuvers.

### Colonels Are Jumpy

Staff cars and umpires' cars started arriving at the airport, where the 119th Observation Squadron is based. Colonels and majors and captains jumped out and wanted to know what was happening. No one knew just who the parachuters were fighting for, or with, or what.

The Marines, however, weren't interested in the fraternal warfare of the Forty-fourth Division. They were just making a test landing to determine how effective their parachute training has been. Soldiers of the Forty-fourth Division seemed relieved when told their sham campaigns are not jeopardized by the unscheduled attack.

Capt. Robert A. Williams, commander of Company A of the Second Parachute Battalion, was the first to step out into 750 feet of thin air over the Nottingham (Va.) Airport, which had been designated the objective of the paratroops.

### His Thirteenth Jump

As a big Douglas transport plane, marked with the Marine Corps insignia, roared over the field, a door opened and the captain stepped out. It was his thirteenth jump, but he's not superstitious!

Forty seconds later he had landed. Less than a second later he stepped off, a brilliant blue parachute came tumbling down—the "cargo" chute which in time of war would have carried "Tommy guns," automatic rifles, grenades, ammunition and other lethal supplies for the 'chutists.

Next, in less than nine seconds nine other men stepped out, all landing within a few feet from their commander, each armed with pistol and grenades.

Then a second transport roared over the field, and 10 more men dropped to earth. The jumps were made under extremely adverse conditions.

### 28-"Knot" Wind

At an altitude of 1,000 feet, Captain Williams explained, the wind was blowing at a velocity of about 28 "knots" while on the ground it had a 26-knot velocity. And test jumps are rarely made if there is more than a 12-mile wind. But all the men landed safely except one, who suffered a wrenched shoulder, painful but not sufficient to have him put out of action.

The real thrill of the day came as two more transports droned over the field and 20 men leaped at the same time.

A thunderstorm was making up, and as the men jumped the wind increased in velocity and suddenly shifted about 90 degrees, sending the men spinning toward a forest off to one side of the airport.

### Dangles From Tree

Ambulances raced across the field, as several men narrowly missed landing in the trees. But all came down safely except one, Corporal Carl Grover, whose chute fouled in a tree and left him dangling about 10 feet in the air.

All of the paratroops wore a uniform that has been modeled after that used by the German 'chutists, a knee-length overall and a new type of crash helmet.

A Marine 'chutist carries plenty of equipment. On his right hip is a .45 caliber automatic pistol, and on his left a pouch for grenades. On the left breast is another container for extra pistol ammunition.

On his chest he carries a spare parachute, in case the regular 'chute does not open. On his back is another container for emergency rations and more ammunition.

And on the left side is perhaps his most vital tool, a knife with a spring blade, so he can cut himself free from the 'chute shrouds if he should be entangled.

While the men jumped from 750 feet yesterday, in combat they would probably leap from around 300, putting them on the ground in just five seconds.

## THE NAVY MUTUAL AID ASSOCIATION

At a regular meeting held on June 13th, the Board of Directors of the Navy Mutual Aid Association approved several changes to its By-Laws which had received a majority vote of its membership.

Some of the proposed changes were for the purpose of clarification and rearrangement. Others are intended to extend the service of Navy Mutual Aid protection.

Members may now utilize their cash value as an income endowment in lieu of a death benefit.

Beneficiaries may have any part of the benefit retained by the Association for a limited period, at interest.

The suicide clause was modified to provide for the return of premiums paid.

An important change was made in the method of effecting amendments to the By-Laws. Future proposed amendments will not be circulated to the entire membership. They will be considered by the Resident Board of Directors and the Non-Resident Directors. Since it is intended to have a Non-Resident Director on all ships carrying a member of the Association, and at all shore stations, a satisfactory cross section of the membership will be reached and much time and expense will be saved.

The Secretary stated that the returns from the votes recently circulated indicate that less than 25 per cent of the membership read the annual report, showing a regrettable lack of interest in the Association.

# LETTERS OF COMMENDATIONS

4 June 1941

From: The Major General Commandant.
To: First Lieutenant Guy E. Tannyhill, U.S.M.C.R., Second Marine Division, FMF, Marine Corps Base, San Diego, California.
VIA: The Commanding General, 2d Marine Division, FMF.
Subject: Letter of commendation.

1. The Major General Commandant has noted with keen interest the reports of the Commanding Officer, Base Air Detachment Two, and of the Commanding Officer, Naval Air Station, San Diego, California, regarding the rescue of Second Lieutenant Walter S. Osipoff, U.S.M.C., after his parachute had become entangled while in the course of making a jump on 15 May 1941.

2. These reports indicate that you were a passenger on the plane from which Lieutenant Osipoff was making the jump; that you, the pilot, the co-pilot, crew and other passengers of the plane displayed skill, coolness and resourcefulness in the emergency and that all functioned efficiently and displayed the highest type of discipline. It is apparent that Lieutenant Osipoff's successful rescue could not have been effected had not those qualities been so effectively demonstrated.

3. Your conduct on this occasion fully measures up to that high standard of cool, efficient action under strain of emergency which is characteristic of the best type of Marine officer, and it is a pleasure to commend you.

4. A copy of this letter and of the reports above referred to will be made a part of your official record.

(s) T. HOLCOMB.

4 June 1941

From: The Major General Commandant.
To: Major Raymond E. Hopper, U.S.M.C., Base Air Detachment Two, Naval Air Station, San Diego, California.
VIA: The Commanding Officer, Naval Air Station.
Subject: Letter of commendation.

1. The Major General Commandant has noted with keen interest the reports of the Commanding Officer, Base Air Detachment Two, and of the Commanding Officer, Naval Air Station, San Diego, California, regarding the rescue of Second Lieutenant Walter S. Osipoff, U.S.M.C., after his parachute had become entangled while in the course of making a jump on 15 May 1941.

2. These reports indicate that you were the co-pilot of the plane from which Lieutenant Osipoff was making the jump; that you, the pilot, crew and passengers of the plane displayed skill, coolness and resourcefulness in the emergency and that all functioned efficiently and displayed the highest type of discipline. It is apparent that Lieutenant Osipoff's successful rescue could not have been effected had not those qualities been so effectively demonstrated.

3. Your conduct on this occasion fully measures up to that high standard of cool, efficient action under strain of emergency which is characteristic of the best type of Marine officer, and it is a pleasure to commend you.

4. A copy of this letter and of the reports above referred to will be made a part of your official record.

(s) T. HOLCOMB.

4 June 1941

From: The Major General Commandant.
To: Captain Harold A. Johnson, U.S.M.C., Base Air Detachment Two, Naval Air Station, San Diego, California.
VIA: The Commanding Officer, Naval Air Station,
Subject: Letter of commendation.

1. The Major General Commandant has noted with keen interest the reports of the Commanding Officer, Base Air Detachment Two, and of the Commanding Officer, Naval Air Station, San Diego, California, regarding the rescue of Second Lieutenant Walter S. Osipoff, U.S.M.C., after his parachute had become entangled while in the course of making a jump on 15 May 1941.

2. These reports indicate that you were the pilot of the plane from which Lieutenant Osipoff was making the jump; that you, the co-pilot, crew and passengers of the plane displayed skill, coolness and resourcefulness in the emergency and that all functioned efficiently and displayed the highest type of discipline. It is apparent that Lieutenant Osipoff's successful rescue could not have been effected had not those qualities been so effectively demonstrated.

3. Your conduct on this occasion fully measures up to that high standard of cool, efficient action under strain of emergency which is characteristic of the best type of Marine officer, and it is a pleasure to commend you.

4. A copy of this letter and of the reports above referred to will be made a part of your official record.

(s) T. HOLCOMB.

4 June 1941

From: The Major General Commandant.
To: First Lieutenant Thomas S. Ivey, U.S.M.C., Second Marine Division, FMF, Marine Corps Base, San Diego, California.
VIA: The Commanding General, 2d Marine Division, FMF.
Subject: Letter of commendation.

1. The Major General Commandant has noted with keen interest the reports of the Commanding Officer, Base Air Detachment Two, and of the Commanding Officer, Naval Air Station, San Diego, California, regarding the rescue of Second Lieutenant Walter S. Osipoff, U.S.M.C., after his parachute had become entangled while in the course of making a jump on 15 May 1941.

2. These reports indicate that you were a passenger on the plane from which Lieutenant Osipoff was making the jump; that you, the pilot, co-pilot, crew and other passengers of the plane displayed skill, coolness and resourcefulness in the emergency and that all functioned efficiently and displayed the highest type of discipline. It is apparent that Lieutenant Osipoff's successful rescue could not have been effected had not those qualities been so effectively demonstrated.

3. Your conduct on this occasion fully measures up to that high standard of cool, efficient action under strain of emergency which is characteristic of the best type of Marine officer, and it is a pleasure to commend you.

4. A copy of this letter and of the reports above referred to will be made a part of your official record.

(s) T. HOLCOMB.

CARDED

# Notes on German Training in Marching and March Discipline

MILITARY INTELLIGENCE DIVISION, WAR DEPARTMENT

**From the translation of an article on the subject, published in the *Militar Wochenblatt, authoritative* German military journal, in October, 1940, along with comment by an American official observer.**

## 1. TRANSLATION

THERE is no doubt that the nature of a march to battle has a great influence on the battle itself. In order to win a battlefield decision, troops should arrive at the point of battle in good physical condition so that they will be able to function efficiently in combat. Troops that are exhausted and over-exerted after a mismanaged march are not likely to win in battle.

Marching is particularly difficult when mixed units are included in the same column. Even the march of a battalion or a regiment is not simple if it is made under unfavorable circumstances.

According to German training instructions, the distances maintained between units in a marching column are for buffer purposes; they ensure uniformity and steadiness in the march. These distances, therefore, vary in length, and if a column commander demands a fixed distance between individual units, the purpose of instructions is defeated. Units the size of a company will have to vary their rate of march constantly in order to maintain the designated distance, and troops will become prematurely and unnecessarily fatigued.

The excellence of a march does not depend upon distances involved, and it might be desirable to increase distances now prescribed by instructions. In peacetime only "normal" marches are made, with distances reduced and vehicles closed up behind either the company or the battalion. Various complications arise in war which were not taken into account in peace, but the condition of troops is always the chief consideration.

Young, untrained, and unconditioned horses cannot maintain the infantry rate of march; they lag behind. Horses from flat and low countries experience great difficulties in high and hilly terrain, and in peacetime training such terrain is usually avoided. But in war the enemy dictates the route of march, and this route often leads over difficult ground.

Vehicles always carry heavier loads in war than in peace, and the war load is generally too heavy for two horses. In peacetime the field kitchen is the heaviest vehicle in the combat company, but in war the three pneumatic-tired munition and tool wagons are the heaviest.

How, then, can a company help itself when marching on a difficult route? Vehicles may be pulled uphill by four horses instead of two, but since this procedure either decreases the rate of march or separates the unit from its vehicles, it is suitable only for occasional short slopes.

A pulling detail designated for each vehicle may, by using drag ropes, assist in pulling the vehicle up slopes, through mud and sand, or over other difficult terrain. Drag ropes are attached to the outside of the vehicle in such a way that they can be taken off even when the vehicle is in motion. Each pulling detail includes at least ten men, so that each company has a total of 50 men on such details. In each company 36 men are needed as light machine gunners for active antiaircraft defense during the march.

Each company has to furnish pulling details for at least three vehicles hauling battalion staff or baggage equipment, since battalion headquarters itself cannot furnish these details. Hence the entire company is employed on pulling details. The men will be prematurely fatigued after such duty; the rate of march will decrease and distances between units will be greatly increased.

Another solution is to divide all vehicles in the battalion equally among the companies and then allot about 15 men to each vehicle as a pulling and pushing detail. As long as the men are fresh, horses will be spared from heavy pulls. But the march will soon develop into a matter of running and halting, and often the distances between units will be greatly increased; the men will soon become fatigued and cling to vehicles, thus increasing the load for the horses. This method, however, has one advantage—the men are always available to assist in case of air attacks, accidents, or other emergencies. This method is suitable for marches up to 25 kilometers, or 16 miles.

The three solutions which have been outlined are not satisfactory for long marches. Vehicles can be unloaded, of course, and such procedure constitutes a satisfactory peacetime solution, but in war every commander, to include the platoon commander, will carry as much ammunition as possible.

There is only one effective measure against overloading —reduction of the capacity of the vehicle. We cannot decide here whether that is possible. Our present overload results from the fact that the munition and tool wagon was originally intended for three rifle squads, a mortar squad, and platoon headquarters. Today, in addition to the load for which it was designed, the vehicle must accommodate a fourth squad, a larger platoon headquarters, and one-third of the excess load resulting from an increased company headquarters.

While the present munition and tool wagon is retained the rifle platoon needs two vehicles. These vehicles can be drawn over any terrain by two medium-sized horses.

(*Continued on page* 51)



XUM

U. S. Marines ready for action on any front

# The Whites of Their Eyes

By Willard K. Smith

*The Case for Civilian Participation in the Defense of the United States Against Invasion*

WE Americans, remote from the Blitzkrieg and concerned with our ordinary affairs, seem to regard the concept of Nazi shock troops swaggering the streets of Portland, Savannah, Santa Fe or Los Angeles with the same 1939 British indifference to the "impossibilities" that have become 1941 realities to them. Amid all our tremendous discussion of defense, the likelihood of actual physical invasion and the relation of our civilian population to it, receives only casual, if any mention at all. Yet, if we grant the possibility of British defeat, and subsequent Axis battle action with this country, the likelihood of invasion must be admitted, if only for the enemy purpose of establishing nuisance bases or as feints to draw our fire from other areas. In some ways, granting Britain's fall, it would be easier for the Axis powers to make surprise landings of sacrifice shock brigades on our shores than on England's now.

It is singular that the American public has not seen the tremendous implication involved in the fact that most of our enormous, unprecedented outlay for armament, troops and warships is devoted to *defense* purposes—not of Samoa, Hawaii, Puerto Rico and Alaska but of our continental coasts and borders. The only alternative to the fact that much of our preparation aims to protect the beaches, ports, countrysides and streets of our 32 frontier states against attacking forces, is the incredible proposition that we have been made the subjects of the greatest misrepresentation in all our history.

The American civilian accepts our navy as an impregnable battle line yet the present war has demonstrated more than anything else the imprudence of relying upon any preconception of defense. The bewilderment of the conquered peoples of Europe and the desperation of the British are eloquent testimony of nations that presumed their defensive barriers and their military alliances rendered them safe from invasion. In 1939 England considered its naval strength was most adequate to prevent serious submarine depredations on commerce. In 1940 they realized it was not, hence one great reason for our lend-lease aid.



XUM

It is not an impossibility, in view of the stupefying reversals of defense since 1938, that our own naval forces could not be neutralized as a defense factor by overwhelming odds, by the intensive use of new weapons in new superior tactics, by air strength or by other catastrophe. For instance, there is no naval strategy worked out now to combat an enemy fleet moving across the Atlantic with ample air strength and protected by a screen of several hundred small submarines fueling daily from mother ships. Both the General Staff of the Army and the Board of Naval Operations admit the possibility of an invasion attempt and no small part of their planning is preparation for it.

If invasion of the United States is impossible as Mr. Lindbergh, Mr. John Flynn and some others currently argue, then to reiterate, we must heavily discount much of what has been officially proclaimed by the President, as well as such current sentiments as those of Mrs. Roosevelt who, on March 24th, promised to shortly provide a plan for home defense to include every American man and woman wanting to serve.

It surely though cannot be granted, in spite of Colonel Lindbergh or one's political attitude, that the President was in error in January when he stated:

> "I have recently pointed out how quickly the tempo of modern warfare could bring into our very midst the physical attack we must expect if the dictator nations win this war."

Any such attack cannot help but fatally and intricately involve the civilian population of our coastal states and, in consequence, civilians can well consider ahead of time their own relation to an invasion attempt—whether they shall be passive or active.

It is inconceivable that American men and women, by and large, would not assume the risks of franc tireurs or free shooters to maintain their homes, families and liberties were they properly prepared to make their initiative worth while. They have done so before. Only in fifty of the three hundred and thirty-four years since the settlement of this country have our people somewhere in it not had to grasp musket, rifle or pitchfork in actual defense of their homes against enemy forces because sufficient regularly constituted troops were not available. The last instance was in 1916!

Naval authorities grant we would have great difficulty in the next year defending our coasts from a simultaneous attack East and West. There is no military testimony today that our present armed combat land forces, or those shortly available, are sufficient in numbers or equipment to defend the 13,000 miles of our coast line and our 6,000 miles of border. Granting these considerations, it should become imperative that the civilians of this country examine their governmental defense program to find out, *first*, if the Army has the best, elemental, immediate defense against invading forces; and *second*, if the civilians themselves could not be a definite, successful factor in defense of American lares and penantes should the planned military program be inadequate, insufficient, or a failure due to many possible reasons, the principal being lack of time and a flabby policy toward subservient groups.

Both of these inquiries can be resolved by the proposition that we should develop a dependable army and civilian *weapon*, one that has been proven efficient and valuable in defense and which can be easily and quickly developed to off-set any deficiency of armament or leadership. *There is such a weapon.* It is the ability of a million combat troops and ten million civilians to handle a rifle and shoot straight. That this statement is not the glib headline of a special propagandist, is proven I believe by the data hereinafter.

Finnish marksmanship saved Finland from complete invasion by Russia. Prowess of the Swiss population with the rifle is claimed a large factor in keeping Switzerland from War during four generations. The shooting efficiency of the Greek mountaineers, opposing Italian peasant and townsmen soldiers with poor training in rifle use, has been a component in Italian defeat so far. In France, Belgium and Holland it was repeatedly demonstrated in 1940 that had the civilian population been armed and trained to shoot as in Finland or Switzerland, or even now as in Great Britain, the German advance could have been materially checked in places, sufficient perhaps for the regular forces to have been recognized for a stand that might have held.

Shooting ability does not come naturally and though American folklore proclaims the belief that we Americans can shoot better than any other citizenry, the details of our military and colonial history do not bear out this legendary contention except in the case of a few especially trained units of our military establishment. Our war time levies have been, by and large, poor to just medium marksmen. This statement is confirmed by many authorities, including General Pershing who complained bitterly in cables and letters that American troops sent to France could not handle a rifle. Some of his statements follow:

> "Among our troops arriving in France recently there was a serious lack of training in use of rifle. It seems inexcusable to send men over who are deficient in this very elemental step in preparation, even though there may not have been time to train them otherwise."
>
> "Specialties of trench warfare should not be allowed to interfere with rifle practice."
>
> "Am mailing you report on serious lack of training in replacements recently arrived . . . some have never handled a rifle. Nevertheless these men have been in service two months . . . . particularly important infantry be given rifle practice to include 600 yards in the United States. Do not understand why this condition should prevail with anything like proper supervision over training in camps at home. Suggest fullest investigation of methods and policies as to instructions."

In spite of such definite remonstrance and direction from the Commanding General of our Expeditionary Force, he complains in his "Memoirs" that the War Department General Staff was unresponsive and limited training to trench warfare. Such a situation in 1917-18 might be the basis of a suspicion as to the present efficiency of army training in marksmanship.

General Harbord remarked in the above connection:

> "Men arrived in France who had never fired a rifle but who were good at close order drill and mass singing."

A very recent technical article by a Marine small arms expert states that except for isolated units such as the Marine Brigade, the 1st Army regular division, and sev-

(*Continued on page* 47)

# Don't Plan These Battles

By John A. Daniels

### Foreword

HISTORY is made by circumstance, circumstance is created by policy and policy is formulated by the necessity for a nation's security, the degree of action taken being governed by the importance of the circumstance. Because of the policy formulated on the Monroe Doctrine the Marines have been sent to many lands in this hemisphere, restoring order, helping with the creation of stable governments and most important, standing as the symbol of the United States' determination to arbitrate and settle disorders in our sphere of influence by diplomacy and as a last resort, intervention. The necessity for armed intervention seems to have vanished, due to a better understanding between this government and her sister republics below the Rio Grande and due to the Good Neighbor Policy which the Administration has so ably executed. Therefore this article is not meant to be a guide to future activity, but a look backward, to an era.

It is not meant to be critical or instructive, propounds no one theory, nor does it attempt to point out the political significance of the intervention in Nicaragua. The writer might better express the motive for the conception of this chronicle as one in which he turns and looks down the road to Yesterday, recalling a period of the Marine Corps history, one of danger, hardship, tragedy and achievement, all, now mellowed by that master painter, Time.

### The Beginning of the Campaign

When, in 1927, no peaceful solution for the problems of revolution-torn Nicaragua could be found by the warring factions of the politicos of that country, the United States was forced to intervene, sending an expeditionary force of Marines to the troubled country, mainly to protect the lives and property of *all* foreigners residing therein. Although the Marines were armed and well prepared for come-what-may, their primary mission was to secure a peaceful settlement, mediate and establish a stable government, favorable to the majority, and this they did and in short order, without too much ado.

But one, Mr. Augustino Sandino, proved irreconcilable to the new order and marched away into the mountains with some forty-odd followers, determined to oppose the new order of things by, as he said, "Driving the Marines into the sea," which statement proves that Mr. Sandino had more imagination than anything else. Thereby hangs a tale.

Immediately things began to happen, patrols were ambushed, towns attacked and natives of the hill country terrorized into cooperation with the patriots, as they called themselves. But Sandino, like the James boys, was accredited with a lot more than he actually was capable of and as the stories of this would-be Simon Bolivar spread throughout the mountains his stature increased until he was regarded as a saint and superman. Reliable sources tell us that the closest Sandino ever came to actual contact with the Marines was when his followers, at this time amounting to a thousand-odd men attacked and besieged 38 Marines, under the command of Captain Hatfield, in Ocotal in 1928. During the battle, in which his most daring and able lieutenant was killed, Sandino remained one and one-half miles outside the town limits. Perhaps if this now deceased liberator had appeared on the scene the attackers might have been inspired to storm the garrison and win a complete victory, with death to all of the defenders instead of only to one. But he remained in the background and was probably in the vanguard of the wildly fleeing insurrectos as they dispersed to the brush, blasted by the bombs of Marine planes, some hours after the attack began.

Ortez, Salgardo, Sanchez, Altimirande, Blandon, these were some of the names that were to crop up whenever savage and ruthless bands were encountered. But most feared and hated was a certain renegade whose ability to lay ambush and his knowledge of the country proved costly to the Marines. His ending, if caught, would have been a most unpleasant one, you may be sure.

In the opening stages of the campaign to clear the country of these bandits, the Marines had all the advantages of discipline, effective shooting and fire-power. They carried mortars, machine guns, automatic rifles, sub-machine guns, hand grenades, rifle grenades and of course the .30 calibre rifle.

They also carried heavies, with all the paraphernalia, bayonet, etc. But as time and experience piled up there began a series of changes in the arming and equipping of the Sea Soldiers. The carrying of mortars and heavy Browning machine guns was discarded in favor of the lighter weapons, the Browning Automatic Rifle, the Thompson sub-machine gun and the rifle. The reasons behind the abandonment were practical and sound, among them being the establishment of many bases from which patrols could replenish their supply of ammunition, the difficulty encountered in freighting the heavier weapons through nearly impassable country and the danger of men grouping while setting up a machine gun or a mortar. Too, there was always the possibility that pack animals might bolt at the first burst of fire and carry the weapon to enemy hands. This emergency was covered by the order to shoot the pack animals bearing guns or ammunition should they prove to be uncontrollable, still the element of what *might* happen was ever prevalent. And the final good reason was that the bandits, fully aware of the destructive power and the devastating

marksmanship of the machine gun and the Marine behind it, were long gone before effective fire power could be brought to bear. Thus, toward the end of the campaign the patrols traveled light and fast, depending upon the automatic rifle, the Tommy gun and the destructive and demoralizing effect of rifle and hand grenades.

The bandits were armed with anything that could make a noise, from Remington .22's on up, 45-70's, horse pistols, blunderbusses, Krags, good, bad and indifferent and Lewis machine guns. They were badly officered and ill disciplined, really had no concrete plan of action, but all had one thing in common, a healthy hatred of Marines and the desire to exterminate the aforementioned in large quantities and quickly. They chose their own time and place to do battle, retreated when the going got hot, used terror, coercion or loyalty to their cause to get information from non-combatants as to the movements and strength of patrols, lived off the country and had that most invaluable of all assets, complete knowledge of the terrain in which they operated.

As for the Marines they were experiencing a type of warfare new to that generation, they were almost without knowledge of the country, were completely unacquainted with the customs and temperament of the people with whom they had to depend on for cooperation. They were unable to select their battle site and plan its strategy, they had no choice as to when it began or when it ended, they had yet to learn to live off the country and they were opposed by an enemy who wore no uniform. On top of all this the knowledge of Spanish was just about nil, which brought that ever dangerous individual into the picture, the native interpreter, who usually plays both ends against the middle for his own profit, yet leans heavily toward his own people, or else. Therefore, whatever little advantage the Leathernecks had in arms superiority was more than offset by the handicaps listed above and these are just the beginning.

The first groups of patrolmen who hit the trail in Nicaragua were pioneers, tough, courageous and the blazers of trails which made the tasks of those who came after them easy in comparison. These men were out for weeks, even months, searching the mountains and the valleys, living off the country, sometimes without food, sometimes without water, often without their own uniform, dressed in native garb as they tore their own clothes to shreds in the bush. Bearded, hard riding, hard swearing, hard fighting men, whose souls and minds were steeled by the circumstances under which they lived. From the blue gluey mud of the Matagalpas, this sea of pasty knee deep mud which the rains made, up through the mountainous Nueva Segovia, on and on to the wild and rocky Chipote Mountains, flung up in mad disarray by some giant hand, down into their valleys and their rivers, over to the stinking steaming jungles of Bluefields, with their reptile infested, insect ridden marshes and swamps, quicksands and sucking mud, up the brawling, riotous Coco River, convoying supplies and keeping it open from the threat of bandit blockade. Battling malaria and dysentery, homesickness and melancholia, ever under the cloud of ambush, swift, sudden, merciless.

With all of these handicaps as a challenge to accomplishment the Marines went about the business of creating bases from which to conduct operations, built aviation fields, kept roads open, established a system of radio communication with the main base (Managua) and found time to train and arm the native troops into constabulary, the Guardia Nacional. Officers and enlisted men were especially selected for this assignment and the proof of the manner in which they accomplished their mission lies within the fact that today, 8 years after the Marines' departure from Nicaragua, the Guardia are in complete control of the situation and have been more than able to continue the suppression of lawlessness.

To the average non-military individual the task of liquidating these ill-trained and poorly equipped bandits would seem to be an easy one, governed only by time and opportunity. It appears too, too simple for an expertly officered and manned corps to track down the guerrillas and engage them, group by group, until all resistance had ceased to exist. And so it would have been, except for a few minor details, such as terrain, borders and knowing who to look for.

As already described, Nicaragua is a wild and treacherous country, bounded on the east by the Atlantic, on the west by the Pacific, on the north by Honduras and on the south by Costa Rica. Therefore, to pursue a group of bandits to the north meant that they had to be overtaken and engaged before they could reach the Honduran border, else they crossed it, dispersed temporarily. When the organized force from the United States reached the border the chase was over, since the rights of a sovereign state were rigidly respected. From their position of safety on the other side of the border, our bandit friends thumbed their collective noses at us, so to speak. The same situation prevailed at Costa Rica. It seems that their border patrols found it much easier to spot uniformed Marines than natives whose arms had already been cached nearby, prior to crossing.

The next obstacle was one which had to be handled with kid gloves. The policy of delivering direct punishment to those proving to be bandits was almost religiously adhered to and punishment of those suspected of leanings toward the side of the insurrectos was out. To burn and destroy bases from which the guerrillas were getting their supplies of food and information was unfeasible and unfair to the occupants of these small settlements, since due to lack of immediate protection they were often forced to provide the marauders with whatever they demanded under pain of death. Thus it can be seen that a savage campaign in which the innocent would have suffered much more than the guilty was an impossibility and that the usual conduct in this type of warfare was relegated to the background, in favor of the method of catching the enemy red-handed. Obstacle number 3 was the real headache. It was a fight in the dark against unknown quantities and persons, a fight which might find you engaged in mortal combat with the man who delivers your wood, the wash-woman's husband and son, or the mozo who worked in the nearby canefields. One of our trusted guides and mulerjos was exposed to be as

(*Continued on page 43*)

CARDED

# The Marines-Old Style

By Lester K. Born

THE Marines have the situation well in hand." The phrasing of that line is modern, but the idea is old. Polybius, writing in the second century B.C., said that "although skilful seamanship is of no little consequence in naval warfare, it is the courage of the Marines that really turns the tide in the direction of victory." This passage is found in his sixth book, the one in which he discourses at length upon the Roman system of government, and he is referring to the Roman Marines. This last point is not without interest, because Rome was primarily a land state, and in her fights she specialized in land warfare.

In fact, the essential difference between Greek naval tactics and Roman naval tactics lies in the employment of man power. The Greek Marines were called *epibatae*, that is, those who went along for the ride, while the Roman Marines were called *milites classici* or *classiarii*, that is, soldiers of the fleet. The Greeks, who gained their victories primarily by maneuvering their ships, used their Marines mainly to repel boarders during the brief contact of vessels. On the other hand, the Romans loaded their ships with soldiers, closed their ships at every opportunity, and, in all essentials, fought a land battle on the decks.

In one sense this practice simplifies the task of anyone who desires to investigate the activities of the ancient Marines, for they were clearly and specifically the fighting men on the ships. The sailors, under the navigating officers, devoted their attentions solely to the operations of the ships, and the rowers had as their sole task that of furnishing motive power. Only in the most dire need were either group called upon to fight. In a second sense this offers one mild complication to anyone striving to push comparisons between ancient and modern action. Many of the functions of the ancient Marines—for example, manning the naval guns, machine guns on the masts, etc.—are now performed in whole or in part by the modern sailor in ships of war.

In the republican times the Roman Marines—men and officers alike—were drawn from the army. The ships were operated by the naval allies who supplied the crews. In the great Athenian navy whose feats of prowess Thucidides has so well described, both Marine and sailor came from the city populace. The former was merely the heavy armed soldier, the hoplite, assigned to sea rather than land duty. At Salamis there were eighteen Marines on each ship, in the Peloponnesian War, only ten. But one hundred and fifty years later, in the First Punic War, Romans and

Captain Charles S. Hill, USMC (center, sitting), and his company, at Rosario, Cavite Province, P. I., in 1900



XUM

Carthaginians alike had large numbers of Marines on each ship. The naval genius of the Greeks did not transfer to the new masters of the sea. They fought, as I have already said, land battles at sea.

While there is ample evidence for the numbers of Marines per ship at this time, one passage which is often cited in connection with that point really should not be so used. Polybius (I.26.7) says that there were one hundred twenty Marines on each ship. But he also tells us that each group of ships had two names: it was called either the First Legion (stratopedon) or the First Squadron (stolos). If this may be taken at its face value, it seems to indicate not so much a force of Marines for naval fighting, as it does a land force intended primarily for occupation of enemy territory. Be that as it may, we know that the Romans at this period habitually had more than one hundred men on board their quinqiremes, and probably eighty or ninety on their smaller vessels, the triremes.

In her struggles with Carthage, Rome eventually gained supremacy of the sea. Having gained it, and having destroyed her late enemy's fleet, she allowed her own—unneeded in times of peace!—to decline. By the time of the civil wars, in the middle of the first century B.C., Rome was distinctly committeed to the land, entirely unused to the sea. Witness the reputed remark of an old company officer addressed to his general, Anthony: "General, why do you have no faith in these wounds of mind, and in my sword, and why do you place your trust in wretched logs of wood?"

Even granting that Plutarch, in writing his life of Anthony, created these words out of sheer imagination, yet it is unlikely that he would have done so if they were out of character, if they were not appropriate to the time and place. Certain it is that Anthony, by his association with Cleopatra (who had a fleet) and his colleague Pompey (who had long commanded a fleet off the coast of Asia Minor), was naval-minded. Octavian, the future emperor Augustus, recognized this, and realized that he must meet him on his own ground—or, should I say, water.

The home forces had to start from scratch. As the historian Valleius Paterculus tells it (Shipley's translation), "Marcus Agrippa was charged with constructing the ships, collecting soldiers and rowers, and familiarizing them with naval contests and maneuvers. . . . Building an imposing fleet in lakes Avernus and Lucrinus, by daily drills he brought the soldiers and the oarsmen to a thorough knowledge of fighting on land and sea."

This fleet and this force, created to fight victoriously the last great naval battle of antiquity, was the precursor of the standing fleets of the Roman empire. The first of these, both in time and importance, were created simultaneously and stationed at Misenum, a promontory above the bay of Naples, and at Ravenna, well up the Adriatic coast. Their commanders took rank with generals commanding the legions; their vice commanders ranked with the commanders of the inland fleets, notably those on the Rhine and the Danube. The commanders of ships ranked with the company officers. The part played by the officers and men of these fleets in policing the empire, in the political upheavals, the wars of aggression was no small one.

A full legion (division) of Marines, which was recruited by Nero and stationed in the city of Rome, was in the thick of action in that wild year—68 A.D.—which knew three successive emperors, Galba, Otho, and Vitellius. In fact, the last named ordered them sent to Spain so that "their savage temper might be softened by peace and quiet."

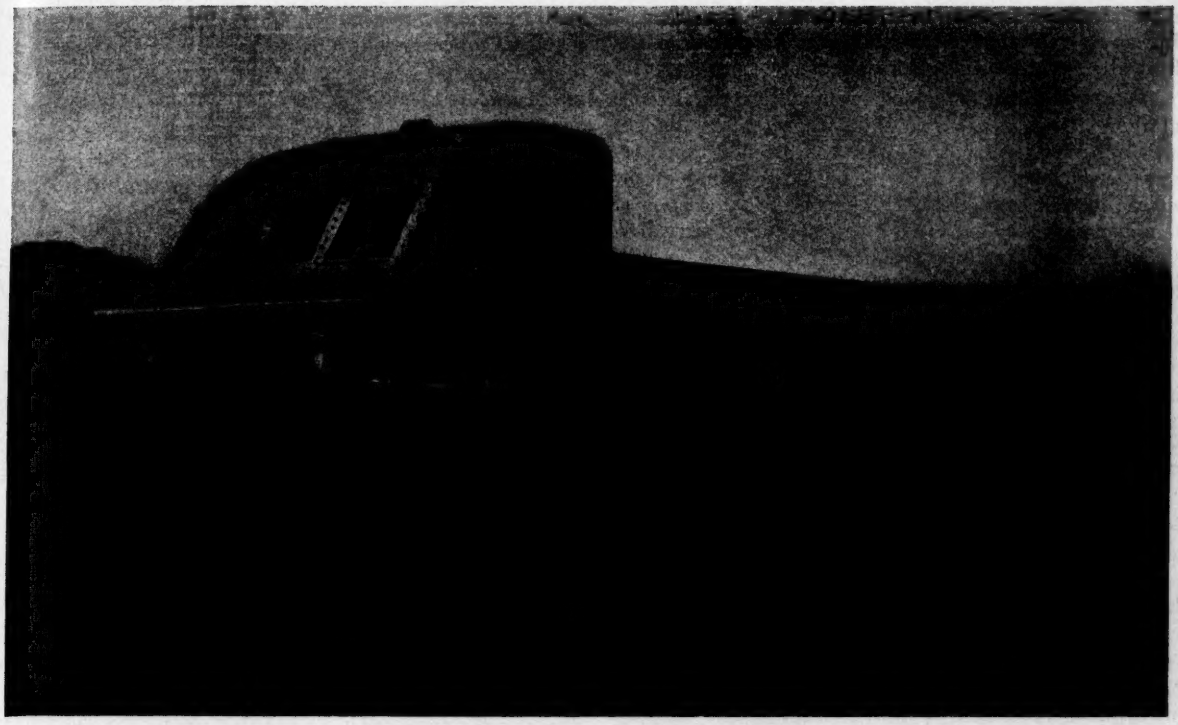
It is probably this same legion which is known as the *Legio I Adiutrix*, the first of only two full Marine legions under the empire. It served under Nero in his struggle with Galba, took part in the civil war of 68-70 at Rome, campaigned around Mainz in the army of Upper Germany from 70 to 85, took part in the campaigns in Dacia and Sarmatia, turns up in Pannonia in 118 where it saw considerable action under Hadrian. Its history as a separate entity lasts into the third century when it was combined with the *Legio II Adiutrix*. Its name is found mentioned as late as the fifth century. Under Trajan it won the title "Pia fidelis." The second Marine legion was recruited by Vespasian in 70 A.D., served in Britain from 71 to 86, was transferred to patrol duty on the Danube where it remained from 86 to 104. It is known to have existed into the fourth century. Like its fellow Marine legion, it won the title "Pia fidelis."

Enough is known about these two legions to justify special studies which were made by a German scholar in 1856 and by an Italian in 1887. Of these cosmopolitan organizations—the men came from France, Austria, Germany, Hungary, Dalmatia, Thrace, Asia, Africa, the lower Danube valley, Macedonia, Syria, and Italy — some eleven generals thirty-seven staff officers, and ninety-two line officers are known by name.

Sometime before the year A.D. 54 the emperor Claudius stationed a cohort (battalion) of Marines at Ostia, the port of Rome at the mouth of the Tiber, and likewise at Puzzuoli, on the Bay of Naples, as a special fire brigade. An amusing incident connected with them is reported by one of the contemporary gossip-columnists, Suetonius, in his biography of Vespesian. These Marines were obliged to march on foot from their respective stations to Rome for their tours of duty there. When they asked for a special allowance, shoe money, the emperor not only sent them away without a reply, but "gave orders that henceforth they should make the trip barefooted. This they have done ever since." Inasmuch as Suetonius wrote some forty-five years after the incident occurred, he may be wrong; on the other hand, he may be right. If he is, life in a station garrison was not all that it might have been.

Other miscellaneous tasks also fell to the lot of the Marines during the early empire, when, in the times of comparative peace and quiet, the original sharp distinction between Marine and sailor disappeared. Troops from the fleet helped to build the landlocked harbor formed from the joining of the Lucrine and the Avernian lakes just north of Naples; in Morocco they built a tunnel; in Greece they constructed a canal; in Germany they helped to get the stone for the market place in the newly

(*Continued on page* 43)



Amphibian Tank—U. S. Marine Corps

# On the Mobility of Base Defense Artillery

By First Lieutenant R. D. Heinl, Jr., *U. S. Marine Corps*

IT IS an accepted proposition that to gain a tremendous increase in residual fire-power, the defense battalion makes a commensurate sacrifice in tactical mobility. Strategically considered, however, the defense battalion ought to be virtually as mobile as any other Fleet Marine Force unit.

How to secure logistic mobility involves two general factors: first, a classification of probable movements by base defense units; second, a survey of base defense materiel. In short, what we must do, and what we have to do it with. Consideration of the first factor should reveal the situations in which defense battalion mobility is most likely to break down; consideration of the second will suggest the cause. A resultant third stage in the process is "the unhesitating application of the probable remedy. . . ."

The anticipatory types of movements which a defense battalion will encounter under service conditions are three in number. That they will vary extensively in detail is of course to be understood; nevertheless, three basic situations emerge. They are:

(1) Routine occupation for garrison or peacetime security of bases within United States territorial jurisdiction.

(2) Occupation of a neutral or formerly foreign-controlled base under peaceful conditions, as by the outcome of a treaty or cession of territory.

(3) Expeditionary occupation of a hostile base which has been seized by offensive components of the Fleet Marine Force and Fleet, and which must be secured for the prosecution of a campaign.

In the first of the foregoing situations, time is of relatively less importance than in the other two. By reason of domestic jurisdiction over the area concerned, it will have been available for necessary surveys, plans and even material preparations, long in advance of the time when a defense battalion must move in. Because the United States fortunately controls virtually all outlying areas upon which our defense depends, it follows that the first situation will most often confront the bat-

talion. In the second and third instances, time becomes of progressively greater importance, and opportunity for physical preparation decreases almost to zero.

To meet all of the foregoing eventualities, the defense battalion now has a single standard set of equipment (although new tables of organization provide for alternative regrouping and modification of weapons in organizations not now in service). Much the same mass of material weighs down every oversea movement, regardless of the circumstances. Does not a study of possible missions urge a restudy of the equipage required?

As now equipped, the defense battalions in service must be accompanied in every movement by a number of five-inch guns and equipment never designed to be more than slightly portable at best. To be sure, the advance-base platform permits sufficient mobility to allow the five-inch batteries to move at will, but, with their massive timbers, which in turn require the services of a Le-Tourneau crane, these platforms and the guns they serve act as physical brakes upon a defense battalion, not only in sheer weight and mass, but in the relative awkwardness with which they must be handled even by the most expert and practical personnel. On the other hand—and this outweighs any bill of complaint—the five-inch gun has certain advantages of fire-power, muzzle-velocity, standardization within the Naval service, and supply. It is therefore rightly standard for base defense, although some students favor the Army 155mm gun, famliar to many as the GPF. The advantages of this weapon over the five-inch Naval gun lie principally in the fact that it is actually a field—and therefore, a mobile—gun, and that its range and calibre are considerably greater, and its striking power thereby increased. (The American 155mm gun, as modified by our Ordnance, has even more heightened superiority in these respects.)

The seacoast artillery problem within the defense battalion, therefore, is to capitalize upon the advantages of the five-inch Naval gun without being weighed down by its logistic intractability. A solution may be effected by long-term advance preparation of positions in United States jurisdiction and by utilization of reserve stocks of ordnance materiel.

Since, as was earlier indicated, the majority of defense battalion operations will involve transit to or between bases already in the possession of this country, there is no reason why peace-time reconnaissance and survey cannot locate positions which will be occupied under service conditions or conditions requiring occupation for security. Reconnaissance and survey could as well be extended to include actual preparation of permanent positions and emplacement of weapons. Such measures would immediately free defense-units in garrison from the onerous necessity of conducting a movement under the burden and in the reduced tempo imposed by five-inch equipment.

In bases of sufficient importance to require a permanent occupation by a defense-battalion, the final installation and location of weapons need not vary from organization to organization; a battery of guns sited and installed under one command will serve the next equally well. Units moving in or out would therefore not be required to carry out movement with any equipment other than that belonging to individuals or to the non-military stores within the unit storeroom.

In the occupation under peaceful conditions of former neutral or foreign bases, there would have been no opportunity for previous material preparation, it is true. But in an occupation of a peaceful nature, there would be relatively little need for haste, and the matter might be treated exactly like the initial occupation of a domestic base: surveys made, permanent platforms and emplacements poured, and weapons installed—but not installed as integral equipment of the particular battalion at that time in occupancy. From then on, the materiel would be transferred from occupant to occupant, each of which would be free to come and go without logistic drawback or hindrance.

Having created a condition in which it would be normal for five-inch artillery units to move without weapons, from prepared site to prepared site, what then should we do in an active situation involving instant occupation and consolidation of an advance base just secured through the exigency of campaign? No opportunity would have existed to make previous preparation, nor would time permit a leisurely consolidation. For such a movement, the 155mm gun would be ideal, and it is accordingly proposed that it be so used. By reason of its mobility and light weight it would meet the problem exactly; under its cover, five-inch guns could be emplaced at will if permanent occupation were envisaged; and, if the occupation were to be transient or temporary, there would be no need for five-inch batteries. But an obvious question arises. How can 155mm guns be tied into units trained and denominated for the five-inch? An answer is indicated in the practice of ground machine-gun companies, which are equipped not only with a certain basic number of guns to be employed in all situations, but a supporting group of "reserve guns," so-called, which can be used in special situations when practicable.

The proposition, pursuing the machine-gun company's analogy, is this: five-inch guns permanently emplaced would constitute the normal weapons of seacoast batteries. In addition, however, each defense-battalion, at its home-station, or at the Depot of Supplies most convenient thereto, would have six "reserve guns," GPF's of the American type if possible, available for expeditionary employment as needed. Perhaps certain situations might make it desirable to increase surface defensive fire-power above that of the three five-inch batteries. In this case, they could be readily augmented on call by as many of the defense battalion's reserve 155's as necessary.

The suggestion that 155mm guns would be more suitable in many circumstances, as an expeditionary reserve, evokes curiosity as to why they should not be employed in all situations, and the Navy five-inch displaced. Cumulatively, however, in the respects which were noted earlier in this article, the five-inch gun appears to have somewhat of an advantage. There is, in addition, this

(*Continued on page* 42)

# The Mounted Expedition to Matagalpa

By J. C. Jenkins

PERHAPS no more unique undertaking has ever been conceived, nor more successfully carried out, than was the combined Mounted Expedition of marines and sailors to the city of Matagalpa, Department of Matagalpa, interior Nicaragua, in the year 1912 when the Sea Soldiers in the course of their many and varied duties again saw fit to take to the saddle.

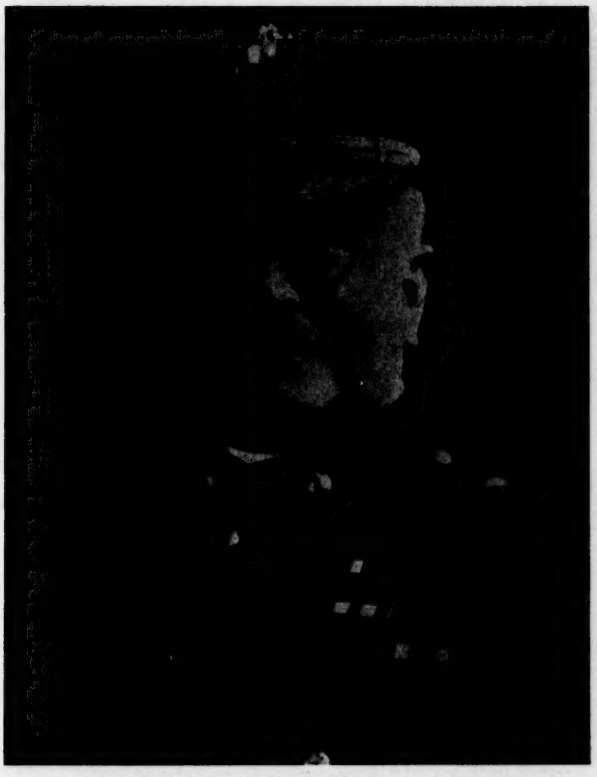
Ever since the days and deeds attributed to the legendary "Captain Jinks," the adventures of the "Horse Marines" have been told in song and story; and somehow their alluring charm is inescapable. Truly the legend or tradition, despite the punning allusions to Captain Jinks, has long been upheld and supported in fact by the United States Marines.

Horses "fed on corn and beans," however, have not always served as mounts for the Marines. As early as the year 1805, in their memorable trek across the north African desert from Alexandria to Derne, when horses were unavailable, or their use was impracticable, "ships of the desert" were employed by the Marines to bear them to their destination. A century later, when they visited the capital of Abyssinia, mules had the honor of transporting the Marines all the way from the Red Sea to the court of King Menelik.

In many far-flung countries of the world—Egypt, Tripoli, Mexico, Abyssinia, Haiti, Santo Domingo, and in China—mounted Marines have galloped, regardless of where such duty arose or whether the mounts at hand were horses, camels, mules, "demi-mules," or what not. In this connection, with Kipling in mind, may it be said that in view of past performances and the means at times adopted, one indeed may well wonder if there be anything under the sun capable of thwarting the versatile Marines when they set their heads to any given task.

The campaign of the First Provisional Regiment of Marines in Nicaragua, in the fall of 1912, under the command of Colonel Joseph H. Pendleton (now Major General, U.S.M.C., retired), in which naval contingents from the ships of the fleet cooperated, after some seven or eight weeks of difficult operations, was drawing to a close. This campaign, though comparatively brief, nevertheless was a "tough" campaign while it lasted. The decisive battle of Coyotepe had become a matter of history; the occupation of Masaya, Chichigalpa, Leon and other strategic places had been accomplished; peace and order had been restored generally and everybody, including the majority of the Nicaraguans themselves, seemed glad that the ordeal was over.

Conditions by this time seemed to warrant a "change of diet" so to speak—some sort of friendly gesture leading to a better understanding and improved relations. Apparently the time was ripe for a new manifestation of friendship on the part of the Americans for the Nicaraguan people, with the opportunity for reciprocation on their part. At the same time it was the desire of the Commander-in-Chief to gain additional information as to the topography and nature of the surrounding country; also, to impress the Nicaraguans by showing the American Flag and demonstrating the power of the United States in another and novel way. The Expedition to Matagalpa was the answer.



Major-General Joseph H. Pendleton, U.S.M.C., retired (then Colonel)

On October 8, 1912, Rear Admiral W. H. H. Southerland, as Commander-in-Chief of the United States Pacific Fleet—Commanding U. S. Forces in Nicaragua, from the headquarters at Leon, issued the orders to Colonel Pendleton stationed at Camp Weitzel, Managua, for the formation and conduct of the expedition. While leaving much to the judgment and discretion of Colonel Pendleton as to time

and other features, the Admiral did designate the exact number of bluejackets to accompany the "one company of Marines," specifying the particular ships' battalions from which they were to be taken, and stressed the importance of selecting "only officers and men in good physique and who are competent horseback riders." In another letter of same date in regard to the detail of naval personnel for the expedition, Admiral Southerland wrote to Lieutenant Colonel C. G. Long, U.S.M.C., commanding at Leon, Nicaragua; as follows:

> "You will please have the commanding officer of the *California* and *Colorado* bluejacket battalions select two squads of bluejackets from each battalion, with an officer in charge of each, to report to Colonel J. H. Pendleton, Commanding First Provisional Regiment, on Saturday, October 12th, as a part of a mounted detachment to make a trip into the interior of this country, and you will make it clear that all of the men so detailed are able to ride horseback."

On October 11, 1912, Colonel Pendleton, in a letter to battalion commanders—Majors W. N. McKelvy and G. C. Reid—in regard to the organization of the Marine Corps force for the expedition, and its administration, directed those officers to organize a force of 111 enlisted men, taken equally from the three battalions composing the Regiment; that the commissioned personnel be the Regimental Commander, and his Staff, including Major S. D. Butler, Captains E. A. Green, F. A. Ramsey and E. P. Fortson; that Captain J. C. Beaumont and Lieutenants R. S. Geiger, R. E. Messersmith and C. G. Sinclair have charge of the topographical work; and that Captain R. B. Putnam act as Quartermaster and Commissary.

In accordance with the orders of Admiral Southerland, twenty-five enlisted marines and nine bluejackets were finally selected for the expedition and assembled two weeks later at a place called La Paz Viejo. The bluejackets were selected from the battalions of the U.S.S. *California, Colorado,* and *Annapolis,* that had been serving ashore. All three battalions of the regiment were represented.

Besides Colonel Pendleton—in command, the following officers and civilians formed part of the mounted force: Major Smedley D. Butler, Lieutenants R. S. Geiger, Alfred McC. Robbins, and George C. DeNeale, Pay Inspector Thomas H. Hicks, Ensign Harold C. Train, Mr. Ignatius O'Reardon, and Mr. J. A. Willey. It is further recorded that two officers of the Nicaraguan forces—Colonel Diaz and Colonel Vargas—together with a number of native packers accompanied the expedition.

The riding and pack animals, furnished by the Nicaraguan government for the expedition, had previously been used by the Nicaraguan troops, and were in such poor condition that many of them were unable to complete the trip over the difficult roads and trails, and had to be replaced by others.

Everything having been placed in readiness, the expedition started from La Paz for Matagalpa, at noon of October 19th. The sight of such an outfit, especially that of the bluejackets joggling along aboard the "four-legged schooners," was a source of no small wonder and amazement on the part of the on-lookers—all in all a spectacle long to be remembered.

The people of Matagalpa, who had been apprised of the forthcoming visit, were looking forward to the event with much anticipation; and, as subsequent events revealed, exceeded themselves in the matter of receiving and entertaining the expedition during its stay of several days in that city.

The first day's march of twenty-one miles came to an end when the party reached Santa Rosa where they went into camp for the night. The next day the town of Panama was reached at 6 p.m., after a march of some twenty-five miles. It was at this stage of the journey that the horses furnished by the Nicaraguan government gave out, and were replaced by fresh animals, which fortunately had been sent forward from Matagalpa. From Panama the expedition again set out, on the morning of the 21st. Thus far the weather was good, but owing to the "sticky" condition of the roads, and the effect of the two or three days of horseback riding on some members of the party, only seventeen miles were traversed on that day. Upon reaching the village of Real de la Cruz, where the party went into camp the third night out, a fine stream of water near that place provided means for bathing and swimming; and full advantage was taken of the opportunity. Early on the morning of the following day the party, feeling greatly refreshed, resumed the journey—Matagalpa now being little more than thirty miles away.

Upon reaching Sebaco, the party indulged in a brief rest preparatory to the last lap of less than twenty miles which was to place them at their destination.

So enthused were the residents of Matagalpa at the approach of the Americans that a large delegation from that city, all mounted, headed by the *Jefe Politico,* went forward to meet, and receive, and escort the party into town.

At about 4:30 p.m., of the 22nd, Matagalpa, described as "that most picturesquely situated city," was sighted; and after a most cordial reception by the combined delegation of Nicaraguans and American residents, Colonel Pendleton's party was escorted into the city, with the Nicaraguan flag, carried by a squad of Nicaraguan soldiers at the head, in the fore. Our flag was carried at the head of the American column by a Marine sergeant and one sailor. It was an impressive and unprecedented occasion.

Rear Admiral Southerland, in his message of October 25 to the Navy Department, stated:

> Colonel Pendleton received most enthusiastic welcome, a large mounted party of officials and foreigners meeting him and escorting him into the city; general effect of the expedition will be excellent.

During the stay of more than a week at Matagalpa the *Jefe Politico,* other prominent officials and citizens, and the entire populace extended every courtesy to the Americans, furnishing them with provisions, including beef, water and firewood, refusing to accept any compensation.

The three senior officers were quartered in the residence of the house of the Acting U. S. Consular Agent, and the four junior officers in the Masonic Temple. The men, who were comfortably quartered in what was called a "jefatura," with free range of the city, were reported as having greatly enjoyed swimming in the Matagalpa River.

(*Continued on page* 41)

# Marine Corps Selections

KS/A17-32(410609)
G

DEPARTMENT OF THE NAVY
WASHINGTON, D. C.

June 14, 1941.

From: The Secretary of the Navy.
To: Brigadier General Samuel M. Harrington, U. S. Marine Corps.
Subject: Precept convening selection board for the recommendation of marine officers for promotion to the grade of captain, U. S. Marine Corps.

1. A selection board is hereby appointed, consisting of yourself as president, and the following additional members:

Colonel John M. Arthur, U. S. Marine Corps,
Colonel David L. S. Brewster, U. S. Marine Corps,
Colonel Samuel C. Cummings, U. S. Marine Corps,
Colonel Louis R. Jones, U. S. Marine Corps,
Lieut. Colonel Merritt B. Curtis, U. S. Marine Corps,
Lieut. Colonel Frederick E. Stack, U. S. Marine Corps,
Lieut. Col. John W. Beckett, U. S. Marine Corps, and
Major Clayton C. Jerome, U. S. Marine Corps.

Major LePage Cronmiller, Jr., U. S. Marine Corps, will act as recorder.

2. The board is hereby ordered to convene at the Navy Department, Washington, D. C., on July 10, 1941, at ten o'clock A. M., or as soon thereafter as may be practicable.

3. The number of estimated vacancies which will occur in the grade of captain before the end of the next succeeding fiscal year in excess of the number of officers now on the promotion list for that grade is two hundred and one (201). The Secretary of the Navy will furnish the board with the names of all officers in the grade of first lieutenant who are eligible for consideration for promotion to the grade of captain, and with the records of all such officers.

4. The board shall perform the following duties:

(a) From among those officers eligible for consideration for promotion to the grade of captain, the law requires that the board shall recommend for promotion those officers whom it considers best fitted for promotion "in number not exceeding the number of estimated vacancies certified to the board by the Secretary of the Navy." Since the number of officers eligible for consideration for promotion to the grade of captain at this time is less than the number of estimated vacancies, the statutory limitation is without practical effect in this instance.

(b) From among those officers eligible for consideration and who will have less than twenty-one years' service on the date the board submits its report, the board shall report the names of any officers whose reports and records in its opinion indicate their unsatisfactory performance of duty in their present grade and in its opinion indicate that they would not satisfactorily perform the duties of a higher grade.

5. In order to insure correct interpretation of medical records, the board may avail itself of the testimony of the Surgeon General of the Navy or of such other medical experts in the Navy as it may desire. (See C.M.O. 7-1938, p. 66, par. 19).

6. The board shall be governed by the act of June 23, 1938 (52 Stat. 944) which establishes "a merit system for promotion by selection" in the line of the Navy and Marine Corps, as amended by the Act of October 14, 1940 (Pub. No. 854, 76th Cong.). The following instructions contained in that act will be particularly observed by the board in the discharge of its duties, viz:

(a) Officers recommended for promotion by the board under the provisions of paragraph 4(a) of this precept shall be those officers "whom it considers best fitted for promotion" (Sec. 9(a)).

(b) The board shall carefully consider the case of every officer whose name is furnished it by the Secretary of the Navy. (Sec. 10(a)).

7. The board shall also observe the following instructions relating to selection for promotion in the Marine Corps, contained in the act of Congress approved May 29, 1934 (48 Stat. 811, 34 U. S. Code 667d), and continued in force by the aforesaid act of June 23, 1938.

"That administrative staff duty performed by any officer under appointment or detail, and duty in aviation, or in any technical specialty, shall be given weight by the selection board in determining his fitness for promotion equal to that given to line duty equally well performed."

8. No discretion is vested in the Secretary of the Navy or in any other person to prescribe a method of selection to be followed by a selection board, and any communication from any source which even remotely suggests that the board depart from the clear instructions prescribed by statute law is illegal. (Decision of the Secretary of the Navy, Apr. 28, 1931, file EN/A17-31(310322)).

9. The following oath or affirmation shall be administered to the recorder by the president of the board:

"You, LePage Cronmiller, Junior, do solemnly swear (or affirm) that you will keep a true record of the proceedings of this board."

The following oath or affirmation shall be administered by the recorder to the members of the board:

"You, and each of you, do solemnly swear (or affirm) that you will, without prejudice or partiality, and having in view both the special fitness of officers and the efficiency of the naval service, perform the duties imposed upon you as provided by law."

10. The proceedings of the board shall be conducted in so far as may be practicable in accordance with the provisions of Naval Courts and Boards.

11. The names of the officers reported by the board, in accordance with paragraph 4 of this precept, shall be entered in the handwriting of the recorder. The report of the board shall be signed by all the members, and shall contain the following certificate:

"We, the undersigned, do hereby certify that:

"(1) We have carefully considered the case of every officer whose name was furnished the board by the Secretary of the Navy.

"(2) In the opinion of at least six (6) of the members, the officers herein recommended as best fitted for promotion are the best fitted of all those under consideration to assume the duties of the next higher grade.

"(3) In the opinion of at least six (6) of the members, the officers herein reported in accordance with paragraph 4(b) of the board's precept have reports and records which indicate their unsatisfactory performance of duty in their present grade and indicate that they would not satisfactorily perform the duties of a higher grade."

12. The recommendations of the board shall be regarded by the members of the board and the recorder as confidential. Upon completion of its proceedings, but not before eleven (11) full days have elapsed, including the date of the convening of the board, the board shall forward the record of its proceedings to the Judge Advocate General of the Navy.

JAMES FORRESTAL,
*Acting Secretary of the Navy.*

KS/A17-33(410609)
G

DEPARTMENT OF THE NAVY
WASHINGTON, D. C.
June 14, 1941.

From: The Secretary of the Navy.
To: Brigadier General Samuel M. Harrington, U. S. Marine Corps President, Marine Corps Selection Board, Navy Department, Washington, D. C.
Subject: Recommendation of officers of the Marine Corps for promotion to the grade of captain, U. S. Marine Corps.
Enclosure: (A) List of officers eligible for consideration for recommendation for promotion to the grade of captain, U. S. Marine Corps.

1. There is transmitted herewith a list of all officers of the Marine Corps who are eligible for consideration by the board of which you are president for recommendation for promotion to the grade of captain, U. S. Marine Corps.

2. There will be transmitted separately any communication received from the eligible officers inviting attention to matters of record concerning themselves which they may deem important in the consideration of their cases.

3. The record of each officer eligible for consideration has been assembled in the Navy Department and is ready for the Board's inspection.

JAMES FORRESTAL,
*Acting Secretary of the Navy.*

The following named First Lieutenants were selected by the Board, and their action was approved by the President on 21 July, 1941:

Henderson, Frederick P.
Decker, Donald J.
Sampas, Michael
Harrison, Charles W.
Leek, Frederick E.
Schoettel, John F.
Moore, Thomas C., Jr.
Thomas, Robert W.
King, Kenneth A.
Fontana, Paul J.
Wendt, William R.
Chidester, Arthur A.
Anderson, John A.
Bell, Gordon A.
McGill, Robert A.
Clark, James M.
Speckman, Peter J.
Kline, Roy L.
Conoley, Odell M.
Reinberg, Louie C.
Buchanan, William W.
Tabor, Jack
Easley, John W.
Kilmartin, Frank L.
Mallory, Eschol M.
Moser, Robert D.
Renner, Joseph N.
Huddleson, Clyde R.
Collins, William R.
Van Dam, Norman
Williamson, Herbert H.
Smith, Leo R.
Miller, John C., Jr.
Todd, Charles S.
Guillotte, Dwight M.
Ivey, Thomas S.
Fraser, Loren S.
Boles, William E.
Smith, Harry O., Jr.
Winecoff, Joseph L.
O'Halloran, James S.
Robb, William G.
Bishop, Ferdinand
Duplantis, Wendell H.
McMakin, Benjamin L.
Little, Joseph R., Jr.
McCulley, Lawrence H.
Vandegrift, Alex. A., Jr.
Law, Edwin A.
Tyler, Paul R.
Moreau, Jean W.
Bell, George B.
Galatian, Andrew B., Jr.
Dowsett, Frederick R.
Martin, Elby D., Jr.
Wallace, Richard W.
Stiles, Wilfrid H.
Masters, John H.
Davenport, William K., Jr.
Moore, Robert B.
Merker, Donald C.
Brent, Harrison, Jr.
Ferguson, James W.
Kramer, William F.
Robertshaw, Louis B.
Roberson, William D.
Haas, Ralph
Prewitt, Ben F.
Nohrden, Maynard M.
Graham, John W.
Rothwell, Richard
Schatzel, DeWolf
Geiger, Allen B.
Bowman, George S., Jr.
Gise, William E.
Bishop, James G., Jr.
Hinkle, Thornton M.
Miller, Ronald K.
Johnston, Edward W.
Evans, Richard A.
Ennis, Louis A.
Barrows, Arthur B.
Banks, Charles L.
Neefus, James L.
Murray, James C., Jr.
Britt, Wade H., Jr.
Barba, William H.
Loomis, Tom Charles
Bjornsrud, Orin C.
Castle, Noel O.
Britt, George F.
Brown, Otis B.
Boyd, Robert W.
Drake, Edward H.
Magruder, Marion M.
Penzold, August F., Jr.
Killen, George W.
Wood, Noah P., Jr.
Buckner, Jean H.
Lemmer, Frederic H.
Hiett, Howard V.
Skinner, George T.
Seibert, Charles J., 2d
McArthur, Arthur P.
Roe, Thomas G.
LaRoque, Oscar K., Jr.
Williams, Marlowe C.
Kyle, Wood B.
Honsowetz, Russell E.
Warye, Russell B.
Schultz, Maynard C.
Van Orman, Ellsworth G.
Yost, Donald K.
Payne, Frederick R., Jr.
Benson, Graham H.
Rickert, Robert W.
Davis, Howard L.
Smith, Levi W., Jr.
Merrell, Lee Christian, Jr.
Kirgis, Howard G.
Stacy, Arthur R.
Walt, Lewis W.
Clark, Robert W.
DuRant, Edward W., Jr.
Withers, Pelham B.
Waldorf, Harry A.
Stonebanks, Jack L.
Heles, John B.
Mustain, Hollis U.
Butcher, Joseph O.
Wermuth, John J., Jr.
Dobbin, John F.
Richard, Robert H.
Knott, Gordon H.

| | |
|---|---|
| Earle, John H., Jr. | Flournoy, Walter N. |
| Godbold, Bryght D. | Scott, Robert F. |
| Wingo, William T., Jr. | Ryan, Lindley M. |
| Hamilton, Edwin L. | Stafford, John P. |
| Rodeheffer, Noah J. | Shine, Frank |
| Funk, Glenn C. | Weinberger, Arthur H. |
| McGlashan, Robert C. | Sabol, Stephen V. |
| Mitchener, Harold J. | Robinton, Roy |
| Mason, Leonard M. | Morris, John E. |
| Bohne, Albert H. | Wright, Erma A. |
| Sayers, Joseph P. | Woodhouse, Horatio C., Jr. |
| Chapman, Max C. | Willey, John E. |
| Thompson, Zane, Jr. | Youngdale, Carl A. |
| Harshberger, John D. | Johnson, Robert J. |
| Hennessy, Daniel J. | Dean, Robert M., Jr. |
| Pickup, Lewis H. | Reeve, Douglas E. |
| Smith, John L. | Metzger, Philip C. |
| Blais, James S. | Mills, James E. |
| Galer, Robert E. | Nichols, Charles S., Jr. |
| Atkinson, Cliff, Jr. | Piper, William J., Jr. |
| Crockett, Henry H. | Campbell, William R. |
| Stonecliffe, David W. | Wight, Cecil W. |
| McKusick, George A. | Chambers, Robert, Jr. |
| Berger, Spencer S. | Cooper, Francis H. |
| Haines, Milo G. | Gill, John H. |
| Donohoo, Malcolm "O." | Humphrey, Gavin C. |
| Neely, Gene S. | O'Neill, Stewart, B., Jr. |
| Charlesworth, Stuart M. | Rich, George D. |

---

From: SECNAV

Marine Corps selection board to recommend officers for promotion to Major General will be convened 18 August. All line Brigadier Generals eligible consideration. Boards to recommend officers for promotion to Brigadier General, Colonel, Lieutenant Colonel and Major to follow thereafter. Name last officer each grade (50) eligible consideration 1941 boards as shown page 585 Navy Register 1940. Attention invited Article 1655 4 and 5 Navy Regulations.

---

## CATERPILLAR'S NEW CATALOG

In a 48-page catalog, just off the press, Caterpillar Tractor Co. has X-rayed its line of Diesel engines; and has presented a detailed discussion of mechanical features and manufacturing methods.

The booklet, which is an unusually complete discussion of the whys and hows of Diesel engine design, makes profuse use of cutaway photographs. The various engine parts are treated separately. Crankcases, crankshafts, cylinder liners, cylinders, valves, timing gears, governors, fuel systems, etc., are accorded sections of the book, and the design and manufacture of each is discussed.

There is a section of the catalog devoted to the horsepower ratings of the engines. Maximum, rated and continuous horsepower are tabulated for each model. Complete specifications, dimensions and performance charts are also given.

The booklet, which is printed in three colors, is available, free of charge by writing Caterpillar Tractor Co., Peoria, Illinois, and requesting Form 5850.


**DOG HOUSE DITTIES** *by Uncle Walter*

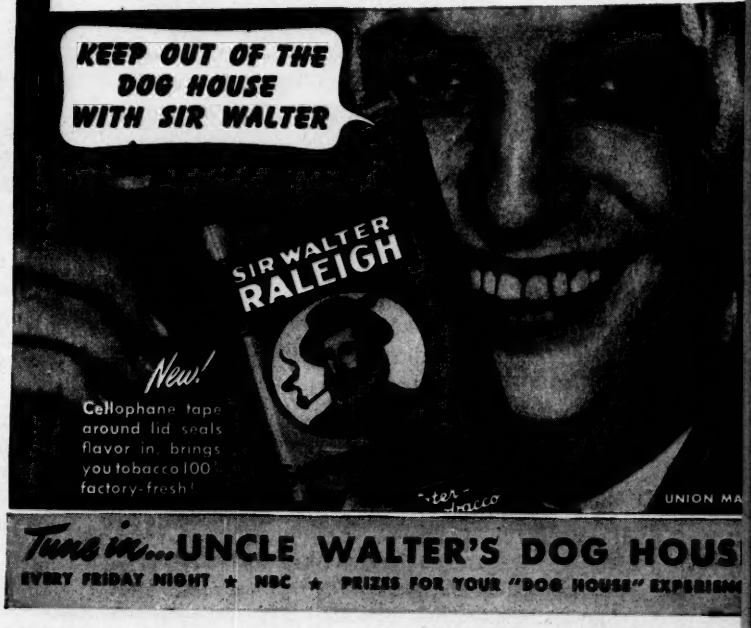
Said Private Peck to Sergeant Grey:
"You give us orders. We obey.
But here's one time when I'll tell you
Of something *you* have got to do!

"Your pipe is stinko, so we hope
You'll junk that stuff that smells like rope
And switch to this Sir Walter blend.
I have some here I'll gladly lend.

"You'll like its rich and fragrant smell.
And we—your slaves—will think you're swell.
Them's orders, Sarge, so don't get sore!
We *know* you'll like Sir Walter more."

**A SURE WAY TO KEEP OUT OF THE DOG HOUSE!**

Clean your pipe regularly, and smoke a mild and fragrant blend like Sir Walter. The choicest burley in the Blue Grass is selected for this grand-smelling blend. No wonder it rates so high with Marines!


KEEP OUT OF THE DOG HOUSE WITH SIR WALTER
SIR WALTER RALEIGH
New!
Cellophane tape around lid seals flavor in, brings you tobacco 100% factory-fresh!
UNION MA

Tune in...UNCLE WALTER'S DOG HOUS
EVERY FRIDAY NIGHT ★ NBC ★ PRIZES FOR YOUR "DOG HOUSE" EXPERIEN




XUM

MARINE DETACHMENT, USS "FLORIDA," 1911
Seated: Left to right, 2d Lieutenant J. C. Fegan, USMC, Captain W. C. Harllee, USMC

# BOOK REVIEW

SEA POWER IN THE MACHINE AGE, by Bernard Brodie. Published 9 June, 1941, Princeton University Press. Price, $3.75.

The story of naval invention in terms of world strategy, "Sea Power in the Machine Age" is an attractively written book dealing with strategy and tactical maritime warfare.

Part I—"The Steam Warship"—recounts the arrival of steam in the battle fleet, its historical and political effect, with a discussion of the tactics and strategy as well as the strategic geographical and fuel problems involved.

Part II—"The Iron-Hulled Warship"—deals with the Iron-Hulled Warship and describes the metamorphosis from timber to the new fabric.

Part III—"Armor Versus Great Ordnance"—This is a detailed account of the vulnerable armorclad and the trend toward a new ordnance, and it describes the race between protection and penetration.

Part IV—"The Torpedo, the Mine and the Submarine" —In this part is the description of naval war as it enters a new dimension and includes the reasons and causes which led to the invention of the modern submarine, with an interesting account of the part the undersea arm played in the World War and the unlearned lessons of the second great U-Boat War.

Part V—"Aircraft in Naval War"—Herein is outlined naval aviation in the World War and the post war periods, naval aviation in modern war and naval invention and national policy.

Bombers in the air and submarines under the sea are threatening the ancient order of sea power. Technology is again revising the power relations of nations, remaking the political map of the world.

In a single century the stately ship-of-the-line with towering masts and billowing sails was supplanted by a streamlined monster of sleek, gray steel. Steam, the greatest innovation since the art of tacking, put a restraining hand on the globe-encircling naval operations, and enhanced the importance of naval bases. Iron construction banished the age-old timber problem; nature and metallurgical skill gave Britain first place as a builder of iron warships. Smooth-bore muzzle-loaders vanished from the sea, replaced by built-up, breech-loading rifles which could send to the bottom enemy ships beyond the horizon.

As each invention altered the conditions of sea warfare it altered the equation of maritime power. And the political repercussions of these changes were not only world-wide, but often—as now—world-shaking.

For twenty-five years the shadow of air power lengthened over a restless Europe. Then it began to write in fire and rubble a story of destruction of docks and tide-gates, of shipyards and partly-built ships, of ports and harbors, and of the heavy industry which weaves the fabric of sea power. As the bomber flew over the blockade to destroy the land bases of naval power, so the ubiquitous submarine, now equipped with the far-seeing eyes of the airplane, slipped beneath the blockade to attack that power on the seas. Again technology seemed to be undermining the foundations of the world order of sea power.

But the fighter plane and the anti-aircraft gun could drive off the bomber; the plane which aided the submarine could also destroy it; air reconnaissance greatly increased the effectiveness of the surface fleet. Perhaps that technology which furnished weapons for challenging sea power might also provide means for defending it.

A fascinating book, which should be read by all officers and students of world affairs.

S. L.

**UNITED SERVICES LIFE INSURANCE COMPANY**

June 13, 1941.

Dear Stockholder:

Your Company is enjoying at this time a most satisfactory growth and development in every phase of its operations. Issuance of new business is proceeding at a greater rate than ever before in the Company's history, despite most conservative underwriting policies adopted to meet changing world conditions. The Company's condition generally may well be a source of satisfaction to every stockholder and policyholder.

The Company has again received the highest Policyholders' Rating (A+) accorded by Dunne's International Insurance Reports, in the 1941 analysis of all life insurance companies. The following statistics reflect your Company's progress during the first five months of 1941, as compared with achievements for similar periods in the previous years.

| | |
|---|---|
| Premium Income: | |
| First Five Months of 1939 | $ 4,196.19 |
| First Five Months of 1940 | 75,085.28 |
| First Five Months of 1941 | 150,766.83 |
| Volume of Insurance Issued: | |
| First Five Months of 1939 | 1,341,274.00 |
| First Five Months of 1940 | 1,862,200.00 |
| First Five Months of 1941 | 5,677,000.00 |
| Business in Force: | |
| June 1, 1939 | 1,298,024.00 |
| June 1, 1940 | 9,262,854.00 |
| June 1, 1941 | 17,576,914.00 |

Accompanying this letter is a list of your Company's Directors and Advisory Committee Members elected at the recent Annual Stockholders' meeting. At this meeting every phase of the Company's progress was reviewed carefully. Of especial interest was the fact that the Company's excess of income over disbursements continues to grow month by month, consistently—a feat almost unique for a Life Insurance Company in its early years.

Your Company now enjoys direct representation at nearly every major post and station in continental United States, as well as the Territory of Hawaii and the Panama Canal Zone. The acquisition of new business continues at a unit cost well below the average among other companies.

Indicative of the character and ability of your Company's Field Representatives is the fact that they lead the country in average individual production. If you wish the Representative in your area to call upon you, or furnish information to prospective policyholders, please let me know.

So that any change in your rank or address may be noted on Company records, please specify on the enclosed reply card and return. Your cooperation in notifying the Company of future changes will also be appreciated greatly.

By all means let your suggestions directed toward advancement of common aims come forward from time to time. Your assistance will be reflected in greater benefits to all.

Sincerely yours,

S. EMERSON,

President.


The New Sedgley

**Semi & Full Automatic Sub-Machine Gun**

*9-mm. Para-Bellum Ammunition*
*124-grain—20-shot magazine*
*1210 muzzle velocity*

*Weight 7 lbs.*
*Only Four*
*Moving Parts*

**R. F. SEDGLEY, Inc.**

*Manufacturers of Firearms*

Ontario & J Sts., Phila.

*New York Offices 41 Broad St.*

Established 1897

CARDED

# THE SQUAD AUTOMATIC

By Captain Melvin M. Johnson, Jr., U.S.M.C.R.

THE modern infantry squad, group, or section, consisting generally of about one dozen men led by a corporal or sergeant, is equipped with some form of automatic weapon, generally known as the L.M.G. or light machine gun.

This gun is customarily served by a crew of from two to four men. Beyond that lies a chasm of contradiction, for there are numerous conflicting ideas as to the characteristics, employment, and utility of the L.M.G. Moreover, some authorities discredit the term "L.M.G." on the ground that most of the weapons placed in the light machine gun category are merely "automatic rifles" or "machine rifles."

Some argue that the clumsy, heavy M.G. is rendered obsolete by the L.M.G. Others contend that the L.M.G. even in its best form is too unreliable, can not deliver sustained fire, and can not deliver supporting fires over the heads of friendly troops. In rebuttal it is alleged that the L.M.G. can go along with the troops, hence need not fire overhead. And the opposition replies that twenty-pound L.M.G.'s are not "light" and can not be kept up with the riflemen. And so the argument runs on.

It is proposed, therefore, to examine the various factors involved and attempt to present some solutions.

Men are invariably influenced by previously formulated conceptions when studying a new problem. Our conception of the machine gun is very firmly fixed in our minds. It is a heavy firearm, set on a heavy tripod mount. It has a belt and perhaps a water jacket. Someone sits behind it, grasps the handle and fires long bursts. Five or ten men are required to take care of it.

This "concept" gun is the backbone of the infantry defensive. You set up numerous cross-fires, final protective lines, etc. You mow down the enemy when he attacks. Set up enough heavy machine guns and get enough ammunition and the attack must be stalled.

We conceive of the light machine gun as exemplified by a magazine-fed weapon having a shoulder stock and two-legged mount. It is air-cooled. There is usually an assistant or two beside the gunner.

In an attack the gunner directs assault-fire bursts at the enemy positions from the hip. He does not hit anything but he is "pinning them to the ground." On the defense the gunner shoots at gaps in the final protective line. This completes the picture, except that all machine guns fire from the flanks. You do not shoot to the front. Apparently you go quietly and very circumspectly to the front, and then you shoot almost parallel to the front or at a slight angle and catch the enemy on their flank with enfilading fire.

To eliminate any undue confusion the L.M.G. is often described as a "weapon of opportunity" by some authorities. You just carry the L.M.G. around and if anything pops up, you pop it down. All of which prompts an inquiry into the subject of the L.M.G., as of 1941.

In the beginning machine guns were regarded as artillery and handled as such. Mechanically they were somewhat complicated, unduly heavy, and not entirely reliable.

The military mind was dimly aware of the value of sudden applications of intense small arms fire from a single source upon personnel in close formations. The Germans were especially quick to grasp the importance of the machine gun, but many other countries viewed with alarm the tendency of M.G.'s to exhaust ammunition. Volume of fire from small arms could be obtained from rifles in crashing volleys, not unlike the blasts of 18th century muzzle-loaders fired by well-drilled automatons in close ranks.

As a concession to radicalism, however, two heavy machine guns were assigned to a regiment, these to be employed as little as possible.

The three outstanding heavy machine guns of the period 1890-1918 were the Maxim (also known as the Vickers-Maxim), the Colt-Browning, and the Hotchkiss.

The Colt-Browning was succeeded by the model 1917 Browning, but neither weapon was used to any extent by the U. S. Army in 1917-18, although some Colts were used by the Canadians and Russians.

The Maxim (German), Vickers (British) and Hotchkiss (French) were heavy guns weighing a total of about 100 pounds each with suitable mounts. All three were originally developed, along with the early Colt-Browning, prior to 1900.

Probably one of the earliest "light" machine guns was the Benet-Mercie, a modified model of the Hotchkiss, weighing about 30 pounds, with bipod mount. The Benet was used by the U. S. Army from 1909 to 1916. It appears to have been unpopular from a mechanical point of view and is understood to have failed badly in the Mexican War of 1916. It is not improbable that the Benet created an unfavorable attitude in the United States toward guns of its class.

Probably the most outstanding L.M.G. in the first World War was the Lewis, a twenty-eight pound, bipod-mounted, drum-fed, gas-operated weapon, resembling the Benet in some respects but differing from the Benet's strip-fed and breech locking mechanism.

The Lewis was used exclusively by the British from 1916 on. More portable than the Vickers and easier to produce, the British used the gun as a front-line automatic to equal the effective fire of several dozen riflemen. It seems generally to have been regarded as a source of concentrated rifle fire.

The Germans used a modified form of Maxim known as the "light" Maxim, a rather heavy gun nevertheless. They also used the Madsen L.M.G., a magazine-fed, bipod or tripod mounted shoulder weapon weighing about 20 pounds.

The French had a light Hotchkiss and in addition the famous Chauchard, known as the "Chaud-chat" or "Chaut-



XUM

chaut." This nineteen-pound weapon was of the machine rifle or "auto-rifle" category, having a detachable magazine and auxiliary bipod. Clumsy and mechanically unreliable, it nevertheless saw much service and was used considerably on the offense, fired semi-automatically from the hip as a source of intense "assault" fire. Fired full automatically from the hip or shoulder its burst was very wild.

At the close of 1918 the Browning machine rifle made its appearance, a much more satisfactory shoulder automatic than the Chauchard though no more easily controlled. This sixteen-pound automatic was usually fired semi-automatically and was in one aspect a compromise for a semi-automatic rifle. Lacking a removal barrel and mount and having a distinct tendency to climb in automatic fire, the B.A.R. has served more as a squad semi-automatic rifle than as an L.M.G., though it has recently been modified by adding a bipod mount and reducing the cyclic rate of fire.

During the past twenty-two years the L.M.G. has made considerable advances, especially in Europe. In fact, the L.M.G. has supplanted the common rifle as the basic infantry arm.

So many factors have influenced the trend of various nations towards certain types of L.M.G.'s, that it is necessary to consider the guns of certain representative nations in turn.

Because of their belated influence upon modern military thought in the democracies, the German L.M.G. may first be considered, followed by the British and French, the Japanese, and the United States.

### The German L.M.G.

The current German L.M.G. is an excellent illustration of a military weapon designed under the influence of somewhat diverse considerations.

It should be recalled that after 1918 the German Army was deprived of most of their weapons, and reduced to a mere police force. In short, Germany started with a clean slate, having practically no Maxim or Madsen machine guns, no aircraft machine guns, and for some years a general restriction upon any re-armament.

In order to arm their Versailles Treaty army the Germans were forced to make a very little armament go a very long way. Thus, in considering a suitable machine gun they were definitely under the influence of this restriction.

The ideal solution to their problem was an all-purpose gun, one which could be employed like the Lewis from a bipod with a magazine or drum, yet which could be fired from a tripod with a belt. Such a gun should be air-cooled and suitable for tank and aircraft use. Above all it had to be cheap and easy to produce.

No doubt influenced by their experience with the Maxim and Madsen the Germans adopted the recoil-operated, 26-pound Solothurn, known as the M-34. This gun is air-cooled, and may be fired semi-automatically as well as automatically, having two separate triggers. The Solothurn has three interchangeable types of feed: a 20-shot detachable box magazine mounted horizontally from the side, a forty or fifty shot kidney-shaped drum, and an open link belt feed system.

The shoulder stock is straight and in line with the bore,

HENSZEY

POWER PLANT SPECIALTIES

Continuous Blowdown
•
Feed Water Meters
•
Flow Indicators
•
Boiler Feed Regulators
•
Evaporators
•
Heat Exchangers

*For Information Write*

HENSZEY COMPANY
Dept. M 9
WATERTOWN, WISCONSIN



XUM

thus minimizing the climb. The sights are high above the bore, due to the shape of the stock as well as to avoid heat waves. The barrel is detachable.

The Germans use this gun for many diverse missions, including parachute-troop service. One gun is assigned to each twelve-man group, of which four men serve the L.M.G.

Riflemen of the group advance by rushes under cover of short, intense bursts from their L.M.G., as well as from short strings of quickly delivered aimed fire from individual Mausers. Defiladed positions are engaged by light mobile mortars and at close range by familiar "potato-mashers" which German infantry habitually carry in their field boots.

On the defensive, when, as, and if the Germans are put on the defensive, the M34 is suited for fire on final protective lines from a tripod mount.

On the whole the M34 appears to be a reliable weapon. However, it is not equal to the heavy water-cooled Browning for sustained fire, nor is it a truly mobile squad weapon. Provided motor transport is available, the M34 may be moved up within a short distance of the enemy. Such was the case in France in 1940. Under less convenient conditions the M34 will prove somewhat difficult to carry on foot, or to move very rapidly from one position to another. Fired from a tripod it is not likely to prove as stable for overhead fire as the heavier guns, yet due to its weight it cannot comfortably be fired as a one-man shoulder weapon.

It may be described as too light for heavy work and too heavy for light work. Perhaps to cover up the clumsiness of the M34 the Germans have gradually increased the number of sub-machine guns issued to their infantry. It is believed that one Schmeisser or Suomi 9mm. gun is being issued to each four-man L.M.G. crew and possibly one or two per group. These weapons provide intense short-range fire in a ten-pound special-purpose shoulder weapon.

Further reference will be made to the M34 in other connections.

### The British Bren Gun

The British were definitely influenced by their experience with the Lewis gun in 1916-18. The following quotation from the British Text Book of Small Arms (1929), page 154, indicates the background of the now well-known Bren.

"The conspicuous advantage in fire power obtained by the German Army in 1914 by the extensive use of the machine gun necessitated immediate steps being taken by the Allies to increase their own machine gun armament. In the British Army the number of guns of the Maxim type was increased as rapidly as possible, but their production could not keep pace with the expansion of the army. Consequently the Lewis gun was introduced, and the new units were armed with it in place of the Vickers, as through certain modifications and the lapse of the old patents the Maxim has now come to be called.

"As the war progressed it was found that the mobility of the Vickers was insufficient to allow it to keep pace with infantry in the attack, and the need for a lighter form of automatic weapon which could be carried easily by a single man became evident. The purpose which such a gun was required to fulfil did not call for the capacity of the Vickers for sustained fire, nor ordinarily for use at long ranges, and the Lewis and Hotchkiss were adopted to fill the gap. The Lewis being the more accurate was adopted for infantry purposes, and the Hotchkiss, being more robust and better shaped for carrying in a bucket, for cavalry.

"At the end of the war the bulk of the fire power of the infantry unit was supplied by automatic weapons, and the principle of fire with movement had been developed to make the greatest possible use of them.

"With the increase in the number of light machine guns to 2 to a platoon, the tendency is now for them to be pushed forward when the enemy has been located in order to pin him down while the rifle sections manoeuvre. For this purpose the Lewis gun has two disadvantages, its weight is too great and it is too liable to stoppages. Consequently a new problem has arisen, that of the production of a weapon which shall be of lighter weight and increased reliability, and yet equal in accuracy and in volume of fire to the Lewis. In dealing with this problem the needs of all branches of the Service must be taken into account, since it is undesirable for many obvious reasons that a variety of weapons should be in use, each specially suitable for one particular branch."

The Bren gun was developed in Brno, Czecho-Slovakia, after the first World War, in 7.92mm. The British tested models of the Brno product, known as the Z.B., as well as modified Hotchkiss, Browning, (B.A.R.), Farquhar, Madsen and other guns.

Apparently the contest narrowed down to the Brno and Madsen. About 1930 the British War Office decided to proceed with the Czech gun in .303 caliber. Since the BRNO gun was made at the Royal Small Arms Arsenal, Enfield Lock, it was called the BR-EN, or BREN GUN.

The Bren is a gas-operated, magazine-fed, bipod-mounted, 21-pound L.M.G. The action was believed superior to the Lewis in that it avoided the somewhat troublesome Lewis turning bolt, gas-rod-actuated camming system. The Bren uses a wedge-type block, linked to the operating rod.

The feed is of the conventional staggered vertical box type, holding thirty rounds, mounted on top of the gun. The sights are necessarily offset on the left side. The stock is straight.

The barrel is quickly removable, of the air-cooled type. The gun is cocked with the bolt open, may be fired full or semi-automatically. Cyclic rate of fire is about 450-500 per minute.

In general the action and feed are simpler than the Lewis, the gun weighs about five or six pounds less. The magazines can be shifted in about 3-4 seconds by the assistant gunner, so that the maximum deliverable fire is in excess of 200 rounds per minute.

The British have had three main difficulties with the Bren. Due to their use of the rim-cased .303, magazine feed trouble has been noted. Due to cordite powder in the .303 the Bren heats up rapidly, requiring frequent barrel changing. Due to the design of some of the parts, production of the Bren has not been easy.

The tactical employment of the Bren is similar to that of the German M34. It is the basic infantry weapon of the British army around which the riflemen cling in ma-

neuver. British authorities have complained that the 21-pound Bren with its unusually heavy magazines either lags behind the riflemen it should support, or slows down the movement of the entire unit.

The British have developed a small, light-armored vehicle known as the Bren carrier which contains one Bren, one .55 cal. Boys AT rifle (34-pound bolt action rifle), and which is used also for radio communication to artillery posts, etc.

The Bren is regarded as the all-around automatic, filling the role of a machine rifle, L.M.G., and heavy machine gun. Fired semi-automatically it is reasonably accurate. Its normal maximum combat range is said to be one thousand to twelve hundred yards. It is not used for overhead fire although it may be mounted on a multi-legged folding tripod which also serves as an AA mount if required.

It is understood that one Bren gun is assigned to every seven men. There has been some confusion about the British organization in this respect for until recently at least sufficient Bren guns for such a distribution were lacking.

### The French Chatellerault

This 7.5mm., 20-pound, gas-operated, magazine-fed L.M.G. was in general very much like the Bren. It was developed after the first World War. The magazine was the single-column, detachable-box type holding 20 or 25 rounds, mounted on top of the gun like the Bren to facilitate feed, yet permit the gun to be placed close to the ground.

### The Japanese Nambu

The Nambu is really a modified Hotchkiss, weighing about 21 pounds. The feed consists of a hopper on the left side of the gun which holds six five-shot clips. The reliability of this feed under all conditions of war is dubious. One advantage of continually dropping clips into the hopper while firing can not be denied.

The Nambu is the chief source of infantry fire power. The riflemen shoot rather slowly and only at occasional individual targets. Japs rely very much upon the bayonet and broadsword, close in under protection of supporting heavier weapons and Nambus. The nature and size of the Chinese army may have influenced the Jap use of the sword and bayonet from a practical standpoint.

### The United States L.M.G.

Strictly speaking there "ain't no such animal." The U. S. Army has recently modernized the Browning Machine Rifle, M1918, by adding a bipod, shoulder support, stock rest, and cyclic rate regulator.

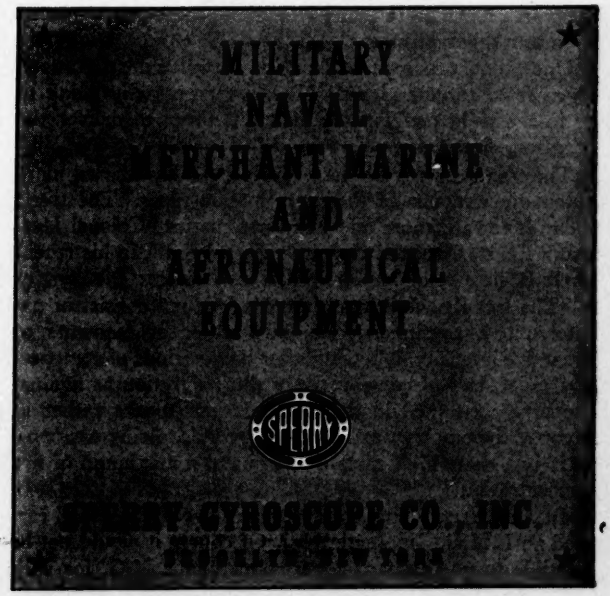
During the past twenty years several modified Brownings have been studied. The cavalry developed an air-cooled heavy Browning on a special tripod mount, gun weighing about twenty-six pounds, mount about twelve pounds. They also tried out a heavy-barreled, 19-pound B.A.R. with bipod mount. The design of a belt for the B.A.R. was attempted

None of the heavy Browning modifications includes any shoulder stock. The gun is fired from a tripod only.

The War Department is at present studying the development of an L.M.G. of the air-cooled Browning type, tripod-

**Refresh yourself**

**Pause at the familiar red cooler for ice-cold Coca-Cola. Its life, sparkle and delicious taste will give you the real meaning of *refreshment.***



mounted, belt-fed, to weigh 22 pounds, mount to weigh about ten pounds.

Chief difference in the U. S. approach to the L.M.G. results from the American idea that the individual rifleman is the true basic fighting unit, whereas the European view regards the L.M.G. squad as the smallest basic unit, made up of several individuals grouped around one L.M.G. In a sense the U. S. view regards the L.M.G. as the servant of the riflemen, whereas the Europeans regard the riflemen as servants of the L.M.G.

Having examined the outstanding types of L.M.G.'s in current use, and having allowed our concept of the L.M.G. to be influenced by the developments of the past, we should pause to consider just what is required in modern combat of the L.M.G.

Infantry squads must be mobile and must have the maximum potential fire power. No time should be lost in getting into action when the opportunity is afforded. The members of the squad must not be unduly exposed to hostile fire while operating or moving with their weapons. Crews serving clumsy, easily-spotted guns are inevitably subject to intense hostile fire. L.M.G. crew casualties are necessarily high. It may be dangerous to concentrate such a large proportion of the squad's fire power in one small group. Unless nearly everyone in the squad has an equal amount of fire power the effectiveness of the entire squad may be destroyed.

Perhaps we are still tied down by our previously formulated conceptions of machine guns and L.M.G.'s. Perhaps we should analyze the role of infantry more broadly.

Primarily infantry squads move, hit, occupy, hit, move, hit, occupy, hit, move, hit, occupy. In another aspect they move, hit, destroy, move, hit, destroy. They move by truck, airplane, and on foot. They hit with small arms fire and grenades. They hit suddenly, fiercely, intensely, and for brief periods. They occupy and destroy, or vice versa. They may defend, hence they hit and then move and hit in counter-attack. Their fire is of no use if they can not rapidly reach positions from which to deliver it effectively. A few shots well-placed from an advantageous position are worth much more than a volume of shots poorly-placed from any other position.

One cannot assume that four out of twelve men, grouped together to serve a clumsy M.G. are necessarily going to be in the right positions at the right times to deliver the necessary fires.

The trend during the first World War lay toward more automatic weapons of the more mobile types. The trend today is toward more and more automatics. Colonel Hermann Foertsch, of the German General Staff, in his recent book, "The Art of Modern Warfare," states:

"The fact that fighting, after all, does not consist of uninterrupted, continuous fire, but rather of moments of great fire intensity, following after long periods of comparative quiet, and of comparatively short duration as against the time consumed in the entire action, speaks rather in favor of the employment of still more quick-firing weapons. It is just these high spots that demand a maximum of fire concentration."

In the extreme, suppose every member of the squad carried an L.M.G. Impracticable? Of course it would not be possible to go this far. How about one L.M.G. for each pair of infantry men? Burn up too much ammunition. Gun too heavy. But don't we want intense fire?

How about a recent British theory of having one L.M.G. per three men? Fantastic? Why depend upon signalling for supporting fires? Why not give every squad of twelve men several field guns and a flock of L.M.G.'s? Ridiculous, of course, except that Nazi infantry had plenty of accompanying artillery in France, mounted on tractors, fired at very short ranges. And their regular artillerymen all carried rifles, too.

Any gun which can be fired automatically requires at least one or two men to assist the gunner and particularly to carry spare belts or magazines, as well as spare barrels, parts, mounts, etc. However, such a gun should be easy for one man to load and operate alone, at least semi-automatically. In many situations the gunner may require the gun more as a shoulder rifle to deliver a few single shots from the shoulder on short notice. Otherwise the gunner would be quite useless and unprotected on the march or during a movement between positions.

In general L.M.G. fire is delivered in bursts against personnel in groups, or on small areas in which personnel are located. Machine guns preferably deliver flanking rather than frontal fire because of the nature of the cone which is narrow and deep. But L.M.G.'s must of necessity often deliver frontal fire, or fire against individuals in open order. In many instances semi-automatic aimed shots are more effective than bursts. Such fire is much less extravagant and against widely scattered individual targets is generally more effective. For such fire the weapon is best operated as a shoulder rifle.

However, the gunner may suddenly observe a small unit of the enemy moving in column on a road, as for example, a mortar crew, or a heavy M.G. crew, or an A.T. crew. His ability to take position instantly and deliver a few intense bursts may prove highly profitable.

Coming to a suitable gun position, he may nevertheless set up his gun mount, prepare his crew, and deliver barrage fires upon profitable targets requiring a higher degree of accuracy in the distribution of the bursts.

If one L.M.G. has proved helpful to the squad, why not more, provided they are truly mobile? Colonel Foertsch intimates the trend, and the British have indicated their intention of issuing one Bren for every seven men, possibly one per four men.

The chief of Infantry, General Lynch, has pointed out the fact that increasing the fire power of the individual rifle from the B.L. rifle to the magazine arm, to the semi-automatic, does not result in any reduction of the number of infantry employed. Steadily the basic and supporting fire power of armies has been increased. Today infantry units are absorbing some of the types of supporting weapons which originally were too cumbersome and unwieldly for the foot soldier. Thus there has been a steady increase in hitting power per infantry soldier. The combat group has grown smaller in numbers, but there are more groups. Each group has greater hitting power than in the past. Compare a modern platoon with a Napoleonic regiment.

Since the trend is toward an increase in L.M.G.'s and since the squad weapons must be entirely mobile, a re-examination of L.M.G. characteristics is in order.

In general the squad L.M.G. should not weigh more

than the M1918 Browning Machine Rifle, or 16 pounds, and preferably several pounds less, to allow for a two pound mount and loaded magazine.

Despite the need for air-cooling, the barrel should not weigh too much as it otherwise destroys the balance of the piece for rapid shoulder firing. The B.A.R. is superior in this respect.

The mount, whether bipod or tripod, should be instantly removable. Otherwise it renders the gun difficult to handle from the shoulder as a rifle. Again the B.A.R. conforms.

The barrel should be instantly detachable for replacement during intense barrage fire. The Bren conforms excellently in this respect, whereas the B.A.R. does not. The Bren is superior to the Solothurn in the speed of barrel-changing. Provided the barrel design is simple, it is easier to change barrels frequently, carrying several spares, and allowing a short life for each barrel. A new barrel is not worth over 200-400 rounds of ammunition at current prices. Any air-cooled barrel is doomed to short life as compared with a water-cooled barrel, and the excessive weight of some air-cooled L.M.G. barrels is hardly worth their gain in endurance.

The squad weapon is generally limited in the amount of ammunition available at one time for its consumption. It may fire intensively for several hundred rounds at a sustained rate of 50-100 rounds per minute. Barrels can be changed frequently during sustained fire except under desperate circumstances. The average light air-cooled barrel will stand over 1,200 rounds at 100 per minute. No L.M.G. is likely to have that much ammunition on hand. A new spare 3 to 5 pound barrel weighs no more than 50-80 rounds of ammunition and is easily carried. Ammunition is more profitably expended through a new bore than through one which is all burned out.

The feed should, if possible, be suitable for sustained fire, be simple, entirely reliable, compact, and permit the gun to be conveniently handled as a rifle if desired.

The Bren feed is very simple and, but for the rim-case .303, quite reliable. However, the Chatellerault, Bren, and Madsen are not too well adapted for rifle handling, and they interfere with the operator's field of vision. Moreover, they tend to disclose or expose the crew when changing magazines.

The B.A.R. magazine is on the bottom of the gun and prevents lowering the gun close to the ground.

The Swiss and Germans use a horizontal box, inserted from the left side of the gun. This has only the objection of bad balance. However, tests indicate this does not seriously impair the handling of the gun.

The M34 has, in addition to the side-mounted box, a drum and a belt feed as well. The drum is heavy and quite complicated. The belt is of the open link type, depending upon the power of the gun to pull it through the action. This necessitates in part a special means of increasing the barrel recoil to insure power, in turn adding to the complication of the mechanism, and increasing the muzzle-heaviness of the gun. The belt tends to render the gun less mobile, and the feed is not likely to be as reliable as with the simpler magazine system.

However, the M34 is a very heavy gun and a greater volume of fire is really demanded of it than would be required of the Bren or B.A.R.

★ Only the tried and proved—only the best—can be trusted to keep American Aviation's quality supremacy ahead. That is why the United States Air Services and all airlines in America look with confidence to Bendix-Scintilla during this time of greatest need. Confidence in Bendix-Scintilla products—magnetos, spark plugs and radio shielding—is a trust that never has and never will be misplaced.

* * *

SCINTILLA MAGNETO DIVISION
BENDIX AVIATION CORPORATION
SIDNEY, NEW YORK

THE WORLD'S FINEST AIRCRAFT IGNITION

*Compliments of*

THE
PAVING SUPPLY
AND
EQUIPMENT COMPANY

The Nambu hopper system is interesting but depends upon gravity. The Lewis drum was too unreliable.

Delivered rates of fire depend upon the speed of changing magazines. A belt-fed gun with 100 rounds in a belt, firing at an average cyclic rate of 500 per minute, could deliver nearly 400 rounds in a minute. The heavy Browning will deliver 500 rounds in one minute. The Bren can deliver up to 275 rounds in a minute. The Chatellerault could deliver up to 240 in a minute. The Solothurn with drum magazine can deliver about 300 rounds in a minute, with box magazine about 225 in a minute. The B.A.R. can deliver nearly as much. But such rates of fire can rarely be used in actual practice.

Firing profitable bursts of 3, 4, 5, 6 shots and laying the gun accurately for each burst, the normal delivered rate of fire from any L.M.G. is not over 100 rounds per minute and often less. Even the heavy Browning rarely fires over 150 per minute, often much less. This is due to the fleeting nature of targets, the need for shifting or re-laying the piece, the time required to spot targets, adjust sights, etc.

One man alone can fire sixty rounds in less than twenty seconds from the Bren if necessary, or at a rate of over 180 rounds per minute.

The gun which can be instantly laid on the target and fired intensely for several bursts usually gets more hits than one which requires careful setting up. Even the bipod is not always easily positioned for effective shooting on a moment's notice. The ground is often very poorly suited for a mount. Usually the gun can be rested on the ground, edge of a ditch, stump, log, low fence-rail, etc.

It has been the practice with heavy M.G.'s to site them in pairs, far enough apart to avoid the loss of both from one hit. Two L.M.G.'s instead of one per squad would have many advantages. Two highly mobile L.M.G.'s, each capable of an effective aimed fire of 100 rounds per minute would substantially equal the effective fire of one heavier-type M.G., yet would be less vulnerable to hostile fire, offer better immediate fire distribution, and engage more targets in a shorter space of time.

The heavier M.G. is more accurate at long range—it must be because it is less mobile. It can deliver more fire over a longer period—it must because it requires more time to move and to prepare to fire. It can fire by indirect laying—it must be able to do so frequently to avoid being quickly silenced by hostile fire.

Infantry groups are forced more and more to operate independently on their own. More and more they require their own supporting weapons.

### Sample Squad

Number of men: 12

Armament:

- Two L.M.G.'s
- Six rifles or eight semi-automatic rifles
- Two sub machine guns (if rifles used)
- Two grenade dischargers
- (All riflemen carry hand grenades.)

Organization and How Equipped:

- Squad leader—sub M.G. (or semi-auto rifle)
- Second in command—sub M.G. (or semi-auto rifle)
- Rifleman
- Rifleman
- Rifleman, acting also as assistant gunner, L.M.G.
- Gunner—L.M.G.
- Grenadier—grenade discharger
- Rifleman
- Rifleman
- Rifleman, acting also as assistant gunner, L.M.G.
- Gunner—L.M.G.
- Grenadier—grenade discharger

### Conclusion

The squad automatic or L.M.G. is likely to be found in increasing numbers. It is also likely to become more of a shoulder weapon and less of a tripod gun.

For stable, accurate fire from a solid mount such a gun as the water-cooled Browning has few equals. Either the gun can fire safely over friendly troops from positions in rear, hence is a heavy gun; or it delivers fire from points along the skirmish line, hence is a "light" L.M.G. and not a "heavy" L.M.G.

An air-cooled version of the heavy Browning on an equivalent mount could probably deliver nearly equal fire,

| *Name of gun* | *Nation* | *Weight* | *Mount* | *Feed* | *Where Feed Located* | *Caliber* | *How Cooled* | *Barrel Detachable* | *Action* | *Remarks* |
|---|---|---|---|---|---|---|---|---|---|---|
| Solothurn | Germany | 26 lb. | Bipod & Tripod | Mag., drum, belt | Side mag. Drum, belt under bolt | 7.92mm | Air | Yes | Recoil | The three feeds may be used interchangeably. |
| Bren | Britain | 21 lb. | Bipod Tripod | Mag. | On Top | .303in | Air | Yes | Gas | 30-shot mag. Tripod also used for AA mount. |
| Chatellerault | France | 20 lb. | Bipod | Mag. | On Top | 7.5mm | Air | Yes | Gas | 20-25 Shot mag. |
| Nambu | Japan | 21 lb. | Bipod | Hopper | Top, side | .256in | Air | Yes | Gas | 30-shot, clip-fed hopper. |
| B. A. R. | U. S. A. | 16 lb. | Bipod | Mag. | Underneath | .30 | Air | No | Gas | Bipod recently added. |
| Browning | U. S. A. | 26 lb. | Tripod | Belt | On Top | .30 | Air | Yes | Recoil | Cavalry type. |
| Madsen | — | 20 lb. | Bipod | Mag. | On Top | Several (8mm, 6.5mm, 7.9mm) | Air | Yes | Recoil | Used by Denmark, Germany, Holland and others. |
| Benet-Mercie | — | 28 lb. | Bipod | Strip | Side | .30 | Air | Yes | Gas | Obsolete, U. S. |
| Lewis | — | 28 lb. | Bipod | Drum | On Top | .303in | Air | Yes | Gas | Obsolete, Britain. |

eliminate the water jacket, and reduce the weight slightly.

But for the squad and platoon a handy weapon which can be shoulder-fired is essential. The higher echelons can furnish the heavy M.G., A.T., artillery, heavy mortar, and A.A. support. But the squads need their own, instantly applied and ever-present small arms fire, both in single shots and in bursts.

It is the function of the truly light mobile, squad automatic to deliver sudden bursts at targets beyond the range of normal rifle fire, though within the extreme range of supporting heavy M.G.'s whose fires it supplements. Normally this would be from 1,200 down to 600 yards.

From 600 yards in the squad show their teeth. The fast-moving L.M.G. picks off lone targets with single shots, group targets with bursts. Enemy personnel are forced to cover and their small arms fire neutralized by L.M.G. and rifle fire. Under cover of its close-supporting L.M.G.'s, the squad reaches enemy groups with grenades.

The situation is well-expressed by Colonel Hermann Foertsch of the German General Staff:

"The nearer the infantry can work its approach to the enemy, however, the more difficult becomes its safe sup-

*(Continued on page 46)*

## LaPLANT-CHOATE ISSUES HELPFUL BOOKLETS

LaPlant-Choate Manufacturing Co., Inc., has just issued five new circulars each 16 pages in two colors.

Form No. A-110-636 describes each of the products manufactured by the Company. Sections are devoted to land clearing, earth moving, and snow removal equipment. Each product is illustrated and a short description of its uses included.

Form No. A-111-637 describes the LaPlant-Choate Hydraulic Trailbuilder. It is profusely illustrated and describes in detail the simple hydraulic controls, down pressure and positive lock, the interchangeability of tools, the extra values built into the equipment, and the Caterpillar Tractor Co.-LaPlant-Choate Manufacturing Co., Inc., distributor organization.

Form No. A-112-638 describes the LaPlant-Choate Hydraulic Bulldozer. It also is profusely illustrated, and includes complete information on the simple hydraulic controls, down pressure and positive lock, tool interchangeability, correct design and balance, and the world-wide sales and service organization.

Form No. A-113-639 is a booklet on the LaPlant-Choate Hydraulic "Carrimor" Scrapers, which range in size from 2.9 to 8.2 cubic yards. Photographs and complete details are given on the hydraulic controls, on the correct design of the bowl and cutting edge, the exclusive features, international sales and service facilities, and a short description of the Forced Ejection "Carrimor" Scrapers.

Form No. 115-641 is a circular on the LaPlant-Choate Forced Ejection "Carrimor" Scrapers. These scrapers range in size from 12 to 33 cubic yards heaped measure. Included is a comparison between the LaPlant-Choate design and conventional design. Construction features, and facts and figures on yardages along with numerous illustrations make this booklet interesting. A short description of the Hydraulic "Carrimor" is included.

**MODERN HAULING AND LOADING EQUIPMENT**

**Mounted on the famous Athey Forged-Trak Wheels, Athey Wagons and Trailers give positive mobility to the United States armed forces under all hauling conditions. Athey wheels provide a self-laying roadway—a steel highway that operates in any weather—rain, sleet, or snow—that keeps heavy loads rolling over mud, rock, sand, or steep grades.**

★

***Athey MobiLoaders,* mounted on standard models of "Caterpillar" Tractors, are setting new production records in loading from stock piles—handling bulk materials—grading—general cleanup work—and many other applications.**

★

***For full information on Athey modern hauling and loading equipment, write:***

**ATHEY TRUSS WHEEL CO.**

**5631 W. 65th Street Chicago, Illinois**

***Cable Address:* "Trusswheel," Chicago**

*Private Telephone Systems* by **AUTOMATIC ELECTRIC**

**Produced by the originator of the automatic telephone, Automatic Electric private telephone systems have a background of over forty-five years of successful application and constant improvement. They are noted for their instant response, accurate operation and rugged, reliable construction.**

**These qualities have proved to be of particular value in the service of every branch of national defense, where equipment must function with unfailing regularity, even under the most adverse and difficult conditions. For complete information, address American Automatic Electric Sales Company, 1033 West Van Buren Street, Chicago, Illinois.**

AUTOMATIC ELECTRIC

**TELEPHONE, COMMUNICATION AND SIGNALING PRODUCTS**

# AMERICAN RED CROSS SERVES MEN IN CAMP

NAPOLEON it was who said an army marches on its stomach. While military experts and others are all in agreement with this axiom, yet the individual soldier must still use his feet. And, unless he is well-shod, and incidentally, well-socked, it won't be long before he will begin to limp, then drop behind and finally have to fall out altogether.

Early in April of this year a private at Lowery Field, Denver, Colorado, received a package from the American Red Cross containing two pairs of well-knit socks. Now, ordinarily two pairs of socks would mean next to nothing in the life of a private in the United States Army, for the men are all well supplied with clothing from the quartermaster.

But in this particular instance these two pairs of socks made all the difference in the world. Many people pride themselves on their small feet, but in this case it was just the other way 'round. When the recruit arrived in camp it was soon discovered he had the biggest feet of all the men there and the quartermaster was indeed hard put to find a pair of shoes, size 15AAA, in stock. And as for socks, he simply did not have any and the private had to continue to use the meager supply he had brought with him from home.

In the meantime, however, the man's plight had come to the attention of the Red Cross. It required no great amount of deliberation for the field director stationed at the post to realize what should be done and shortly he had two of the local chapter's expert knitters working on the problem. The result was that in no time at all two pairs of socks of ample size to allow for shrinkage were delivered to the young soldier. Henceforth, as long as he is stationed at Lowery Field where his particular problem is now well-known to the Red Cross, he will have no need to complain insofar as his socks are concerned.

Early this year, in response to a joint request from the Surgeons General of the Army and Navy, the American Red Cross established what is now known as the Blood Procurement Project. This undertaking is a part of the effort under which a huge blood plasma reservoir is being created for use by the Army and Navy in giving transfusions.

Blood collected from voluntary donors at Red Cross receiving centers is rushed to laboratories where, after removal of the red and white cells, the resulting plasma is converted into a dry, powdered form and sealed in sterile, vacuum flasks. In this state it will keep indefinitely and, to be used for a transfusion, it only needs to be dissolved in distilled water. Results of transfusions with plasma instead of whole blood have shown that this substance is ideal, especially in emergency cases.

This blood collecting project, limited only by facilities available for processing whole blood, recently has been extended to include a number of chapters in the larger centers of population throughout the country. Present plans call for the establishment of a bank with 200,000 units, a unit representing one pint of processed whole blood, the normal amount taken from the average donor.

To speed this work along, the Red Cross is putting into service a number of mobile collecting units, completely equipped with instruments and materials for drawing blood. In this manner a much wider area can be covered.

This project is but one of many being conducted by the American Red Cross in the field of national defense. At every military camp and naval base, in every Army and Navy hospital, trained Red Cross personnel is stationed, ready to assist the men in uniform meet any of the many non-military problems that may suddenly confront them.

On the other hand, through its more than 3,700 chapters and 6,000 branches, the Red Cross reaches out to every county, every community, every country cross roads. Thus it forms a perfect link between the man in camp and the folks back home, no matter how wide the separation.

Just how the field directors and chapters work together is illustrated by the following incident:

A chief pharmacist's mate and his wife, upon being transferred from San Diego to Quantico late last year, left their children in the care of relatives on the Coast until settled in their new post. But shortly after arrival at Quantico, the husband was again transferred, this time to Cuba.

His wife remained at Quantico and when she was ready to have the children come east, she called at the Red Cross Office at the post to see if a loan might be arranged to enable her to go to Chicago to meet her children. The railroad would not assume responsibility for them beyond that city.

At this point the Red Cross suggested that in all probability arrangements could be made to have a representative of the Chicago Red Cross chapter meet the children upon arrival and put them on a train for Washington. This procedure would eliminate the need of a trip to Chicago and the children would be perfectly safe.

This suggestion was more than welcome, the Chicago chapter agreed to the arrangement, and the children started on their journey from Los Angeles, where they had been staying. By means of pictures sent on ahead the children were identified as they arrived in Chicago and were subsequently put safely aboard a train bound for Washinngton where they were met by their mother.

In the medical field the Red Cross Nursing Service has already furnished some 5,000 nurses to the Army and Navy, while additional ones are being called up almost daily. At the hospitals also are stationed trained medical social workers who play an important role in the care of the sick. At the request of medical officers they obtain through hometown chapters family and medical histories and other information which often may be of material help in diagnosing and treating a case.

Red Cross activities are made possible because millions of Americans each year join the organization during its annual Roll Call. This year the membership campaign begins Armistice Day and continues through November 30. Members of the United States Marine Corps at posts throughout the country today hold membership in the Red Cross. It is hoped that all present members will renew their affiliation during the forthcoming Roll Call, and that great numbers of new members will be enrolled.



XUM

## NEW LUMINOUS AND REFLECTOR CHAIN IDEAL FOR DEFENSE PRECAUTIONS

"America hasn't reached the 'black-out' stage as yet, and we hope she never will," says O. H. Hershman, president of the Star-Lite Co., of Indianapolis, Indiana, "but if that time ever comes, army camps, munitions factories and other defense establishments will be prepared. Many of them, according to the numerous orders reaching our plant, will be equipped with luminous Reflecto-Chain, which is distantly visible in an approaching focused light, however, *due to being luminous, they are also visible at short distances in total darkness.*"

Reflectorized signs have been so greatly improved in recent years that they will "pick up" and reflect exceedingly dim lights, such as would be used on automobiles under blackout precautions. Only recently has it been made possible also, by a special process, widely used in England, to make these signs and markers luminous in the dark, at reasonable cost. Provisions have been made also for making these reflected lights invisible from overhead except where and if required for landings.

"Reflecto signs and traffic markers are now used almost universally for dividing traffic lanes on highways, for direction signs, road side danger signals, etc. When car lights are not approaching, they are invisible, except for a luminous glow at short distances, yet provide the most dependable markers under traffic conditions, as they have no electrical connections to get out of order, consume no current and are so sturdily made as to withstand a surprising amount of punishment in service.

"Traffic lane markers are made in numerous sizes and designs, with single, double or triple 'lights,' with different reflectionizing colors, etc. They are scientifically designed to minimize tire wear and dangers of skidding. In addition, our company manufactures 'REFLECTO-CHAIN,' a patented product consisting of a series of reflectors mounted in a *flexible luminous* or *non-luminous* chain which can be bent or curved to form letters and figures.

"We hope the advantages of luminous reflectorized traffic markers and signs will never be put to the test in 'blackouts' in America. There is ample need for our products in normal peace time, but our industry is ready to place all our facilities at the command of defense authorities, should the emergency arise."

---

## THE MOUNTED EXPEDITION TO MATAGALPA

(*Continued from page 26*)

From first to last, the party was lavishly entertained and dined by the Matagalpans, who were referred to by Colonel Pendleton in his report as "our new found friends."

The activities included trips to near-by coffee plantations and the big American and foreign-owned mines, following which came a banquet at the mines, "which approached a Roman feast in the quantity, quality, and di-

"JUST WONDERFUL CANDY"

**To know why "Clark Bar" is one of the really great sellers in America — Eat One! Taste the difference — Convince yourself.**

**SMYSER-ROYER CO.**
*Established 1840*
MANUFACTURERS OF
ARCHITECTURAL & ORNAMENTAL METAL WORK
Main Office and Works
YORK, PA.

*Compliments of*

**C. SWANSTON & SON**

370 Twelfth Street — San Francisco, Calif.




XUM

versity of its viands, where the best of good feeling prevailed, and the action of the Commander-in-Chief in sending this force of Americans was enthusiastically toasted and sincerely applauded." Indeed, by now, it seems that the Americans were as much impressed by the hospitality of the Nicaraguans as were the Nicaraguans through the purpose of the expedition. The last day of the social activities (Saturday, October 27,) included in the evening a reception and ball given in honor of the visiting American officers, at which "about one hundred and twenty men and ladies remained until three o'clock in the morning."

Sunday, the party rested for the next day's start on the return trip.

Ruefully, the expedition left Matagalpa (9:30 a.m., October 29). The *Jefe Politico,* and the *Mayor de Plaza,* and at least fifty of the residents, native and foreign, mounted and rode with the expedition for five miles out, where good-byes were said. Sebaco, a distance of 19 miles, where the party stopped for the night, was reached at 2:30 p.m. The heavy rains which had begun to fall the previous Saturday continued, with the trail to Tipitapa rendered impassable.

It was at this stage of the return trip that Colonel Pendleton decided to go via the San Francisco Trail—over the mountains, 2,800 feet in altitude—described as "very picturesque, but very difficult." On the following day the expedition arrived at Trujillo, 14 miles, at 1:45 p.m., "after five hours of hard going," and there spent the night. Leaving at 7:10 a.m., the next day, they marched 18 miles over rough mountain trails and deep sticky adobe llanos to San Francisco on the shore of Lake Managua, in a heavy rain, arriving at 1:45 p.m.—the pack train coming up about an hour later.

The steamer *Managua,* which had been sent by the Nicaraguan government to meet the party, reached San Francisco at 7:00 p.m., but without enough wood for the return voyage. The rain came down in torrents nearly all night, and everyone was "soaked to the skin" for the second time in twenty-four hours. Finally, after acquiring the wood for the steamer, the expedition reached Managua at 11:00 a.m., November 1—thus ending the Mounted Expedition to Matagalpa.

* * *

Colonel Pendleton, in his final report, under date of 2 November, 1912, stated in part; as follows: "I believe this trip did a great deal of good. It has taught something to every member of the expedition. It has shown the Nicaraguan people that the American is a versatile personage, who may be depended upon to go anywhere, at any time, if necessity demands. . . . I wish to add a word of commendation for all the officers and men engaged on this expedition, their cheerful demeanor under trying circumstances was most noticeable, and their readiness and adaptability would astonish anyone who had not learned by years of experience and association the remarkable characteristics of the American military men—particularly those of the Navy and Marine Corps. They all fully deserve the confidence that the Commander-in-Chief reposed in them when he planned this expedition—THE FIRST OF ITS KIND IN THE HISTORY OF THIS COUNTRY.

# MOBILITY OF BASE DEFENSE ARTILLERY

*(Continued form page 24)*

consideration, that by normally employing numerous fixed five-inch installations, the great majority of defense battalion movements would be executed without any seacoast guns at all, whereas, if the GPF's were made standard for all situations, the seacoast artillery group would always be forced to move more or less encumbered by heavy materiel. Thus, the project of 155mm "reserve guns" coupled with normal fixed five-inch installations, lends to the defense battalion the greatest mobility in the greatest number of situations.

To render efficiently operative such a plan, a number of requirements would have to be met. First, all five-inch artillery personnel would have to be trained not only with their own weapon, but equally with the GPF. Second, fire-control equipment would have to be so designed as to be equally adaptable to either weapon (not a prohibitive requirement, since each is governed by the basic principles of seacoast gunnery). Third, existing reserves of five-inch guns would be depleted by installation of such batteries in all sites now under U. S. control and deemed worthy of defense. Fourth, at the outset of such a scheme, five-inch units designated for survey and preparation, would be required to move from site to site until all had been so prepared.

The advantageous results of this plan follow logically. In the majority of defense-battalion movements, five-inch artillery units would not be forced to carry their guns with them; the saving of time and effort, and resultant increase in the battalion's mobility would be very great. In the minority of movements, the five-inch artillery would be forced to travel equipped—but with the logistically flexible 155mm gun. Fire-power of the battalion would be potentially capable of being doubled in many instances when GPF's could augment existing installation (in this instance, additional personnel would be required—their training and source would present a problem to be met as the occasion demanded, either by drafting provisional or Marine Corps Reserve companies for the duty, or by employing the nearest available post troops of other Marine Corps activities). A very considerable gain from such an arrangement as has been proposed is that the excellent pioneering and engineering talents usually developed and encountered in the five-inch artillery group would be normally available to the entire battalion in the course of a movement, for the five-inch alone would be unencumbered, and thus would constitute a trained reserve of pioneer-troops, a great asset to any battalion.

Success of this plan hinges, in the last analysis, upon availability of material, i.e., of a large number of Navy five-inch guns plus an allowance of six GPF's per defense battalion. It also hinges upon an allowance of uninterrupted time sufficient to establish and prepare positions in the many sites which defense battalions would probably be called upon to occupy. Whether, in these disturbed times, either of these contingencies would in-

hibit realization of the project, is a matter for practical determination. Nevertheless, given favorable conditions, one can hope to see the scheme in execution, for maximum logistic mobility is vital to base defense weapons.

## THE MARINES—OLD STYLE

(*Continued from page 22*)

founded city of Cologne. Permanent detachments from both great fleets (Misenum, Ravenna) were quartered in Rome, in different parts of the city, in permanent barracks, to work the machinery connected with the theaters. Whether as a noble gesture, or for what reason so ever we can not know, but in the year A.D. 212 they united with the military garrison of the city and gave a theatrical production!

Of course there were other tasks, too, less attention arresting, perhaps, but more closely allied to their original function. Men from the high seas fleets were often transferred to service in the inland fleets, or in active service with the military, or in substitution for the army troops. Hyginus, in his fragmentary essay on the construction of permanent camps, tells of regular use of Marines, screened by cavalry, to open up the way for the main body.

Because of the strong military traditions of Rome the service on the sea never attained in the popular mind a status equal with that on the land. In fact there are instances where, in the turbulent days of the emperor-makers, Marines demanded, and got, transfer as a unit from the fleet to the army. Dio Cassius, in his history of Rome, cites an instance of a colonial governor who was punished by death, when political parties changed in power, because he had transferred a general in the army to command in the fleet. This caused him to lose face, and his political friends evened the score. On the other hand, in the civil war fought between Caesar and Pompey, where so much had to be settled on the sea, "Caesar assigned to his fleet the bravest men . . . picked from all his legions. These men had all volunteered and requested this service for themselves." At least that is Caesar's story, for he tells it in his *Civil War,* chapter 57 of the first book.

What we have just given is, obviously, by no means the complete story of the ancient Marine. Some may miss references to active fighting, but that story would entail the retelling of naval warfare in the period. However, several things do emerge clearly enough from the somewhat confused picture of Marines in Rome. The service was essentially what it is today. Bodies of Marines (soldiers of the fleet) served in small detachments on each ship; in battalions they garrisoned shore stations; in full divisions, acting with or in place of army divisions, they constituted a fighting force in war, a peacetime police force in provincial areas of the far-flung empire. The Roman Marines usually had the situation well in hand wherever they were.

## DON'T PLAN THESE BATTLES

(*Continued from page 20*)

big a bandit as there was around that area only after we had suffered casualties. The wash-woman, the storekeeper, the alcalde and even the padre worked against the Marines in most cases, even as we tried to rid their country of its primitive racketeers.

It is almost a waste of words to say that there can be anything done in the way of planning tactics and technique for an engagement in the brush. Unlike modern war or any war in which opposing forces meet from predetermined angles or fronts, bush warfare has no front, no rear, no flanks. It is the threat of an all encompassing circle with no indication as to when, where or how the assault might begin. Every approached cane

★
REEVES BROTHERS, Inc.
NEW YORK
54 WORTH STREET
Marine Suiting, Marine Herringbone, Army Twills, Navy Drills, Shirtings, Slack Cloths, Fine Broadcloths, Gabardines and Suitings
*"From Cotton to Cutter"*

ROCK RIVER WOOLEN MILLS
JANESVILLE, WISCONSIN
MANUFACTURERS FINE WOOLENS
Specializing in
AUTOMOBILE UPHOLSTERY AND UNIFORM FABRICS



XUM

field, banana grove or hillside thicket may be the place. Gullies and ravines are avoided as the plague. Rivers must be crossed with the care and caution of a man walking on T.N.T. Carefully, one or two men at the time, as the remainder stay covered, covering them, then two more, then two more, as the first units reconnoiter the opposite banks, then string out in the direction of march, until the whole patrol is across. No bunching up in circumstances such as these.

Mounted patrols usually spaced themselves so that there was about 25 feet between the riders and afoot about 5 paces, in echelon, when conditions permitted this type of deployment.

The ideal patrol, after bases had been established permanently, was about 20 men. A patrol this size had speed and mobility, was easily kept under control by its leader, even during an engagement, and was able to carry sufficient automatic weapons and grenades to gain fire superiority over any group of attackers, even though they might reach up to 300 in number. Two Tommy guns, three B.A.R.'s and perhaps three rifle grenadiers spaced throughout the patrol, provided terrific fire power and coupled with the murderous accuracy of the trained marksmen, proved more than a match for the superiority in numbers.

A Tommy gun was usually placed in the point and at the tail of the rear guard because of the ease with which they could be swung into action and because of the fact that the guerrillas usually opened up on these portions of a patrol. The Tommy's paralyzing striking power and its deadly accuracy at short ranges proved it to be invaluable in this type of campaign, and threw terror into the enemy. The Browning Automatic rifle too, was found to be ideally constructed and balanced for the trail and was an integral part of all patrols. The rifle and hand grenade, in addition to their destructive powers, had a demoralizing effect on those whom they were employed against. The roar of a bursting bomb takes something out of a person whether trained or not and these insurrectos certainly weren't the most disciplined troops in the world.

In just about every case, normal security on the march, as employed in tactical warfare, was impossible, due to the tangled undergrowth on either side of the trail. To attempt to use flankers was a waste of time, since they would have had to cut their way, foot by foot, and still be unable to see anything to the flank away from the patrol. Therefore, the patrol was divided into 3 sections, the point, strong enough to take care of itself, until help could get to it, the main body, sledge hammer of the outfit, and the rear guard, also capable of conducting an independent engagement, till fire could be brought to bear from the rest of the patrol. Distances between these elements were governed by the nature of the terrain, visibility, accessibility and also by any knowledge which might indicate attack at a certain point. Reconnaissance was often made by small units, but to send less than two men into screened places was deemed inadvisable since short work could be made of them and the patrol would be no better for information and minus the men and weapons.

It is interesting to note the various theories advanced by officers who commanded and led patrols during the occupation. Some advocated halt and reconnoiter at any point suspected of being an ambush. Others believed in reconnaissance by fire, in plain to drop a rifle grenade into the area of doubt, with the firm conviction riding on the grenade being that if there was anybody or bodies in there they would come out and pronto. The argument against this was that such tactics gave the position of the patrol away and the counter argument was that the patrol was under constant surveillance, so it didn't matter.

A certain percentage of officers were dead set against mounted patrols, declaring that the animals made too much noise at night and on patrols carried over an extended period of time, they became a nuisance. The answer from those in favor of mounted patrols was that the energy of the troops was conserved for an engagement on any terrain, that the greater mobility and speed of the horse Marine was of value in reaching a trouble spot, and that troops on foot made a most uniform target for the low Lewis gun. Mounted troops, said they, proved much more difficult targets, aided as they were by the milling frightened animals and the dust screen they created. This confusion gained the ambushed unit invaluable seconds in which to find cover and try to estimate the situation. Both methods of patrolling were vital to success and where one would apply the other would prove to be impractical, therefore, the discretion of the officer responsible for the patrol and its conduct set the rule.

The iron bound rule for an ambush was, "As soon as cover is gained look around, concentrate your heaviest fire on the strong points and then at the first favorable instant, *get out of that place* and reach a predetermined position, taking up a devastating fire on the strong points again. When an enemy attacks from ambush you may be sure that he has you just where *he* wants you and that everything favoring him has been plotted out in advance. Thus the idea is to get out of that particular spot before serious losses are incurred and take your chances of gaining some advantage from a new position."

The comparatively small losses suffered by the Marines were due in great part to the savageness and vigor with which they took up the fight when the gauntlet was thrown down to them, their punishingly accurate fire, the response to orders and their initiative. These qualities caused the bandit tactics to base largely upon delivering a paralyzing blow to the patrol without warning, and if this first burst failed to cripple the unit appreciably, then the next course of action was to take to the woods, when the firing got too hot. Prolonged engagements became very unpopular with the insurrectos after several of these had produced heavy casualties.

Perhaps the greatest asset to the Marines was the lack of fire discipline among the bandits, plus the Latin American tendency to close the eyes pull the trigger and yell out Viva something or other. Many a contact was begun prematurely by some nervous individual who jerked a shot away before the trap was entered, giving the Marines those precious seconds in which to get to cover, before the main fireworks got loosed.

Dead bandits were hard to find after an engagement. When they were found and identified it usually incriminated the male relatives of the deceased, for if one was a guerrilla, the others in the family were tied up in the business in some manner. Consequently, unless immediate search was made after a contact, later search proved fruitless, since the dead were buried in a common, not visibly marked grave. Immediate search wasn't very often instituted, especially if there were casualties in the patrol, since the first concern was for the succor of the wounded and the proper disposal of the dead.

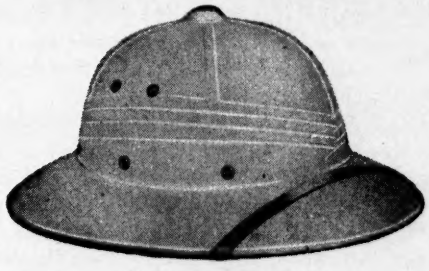
This was no modern organized war, with stretcher bearers, ambulances and field hospitals close by. This was stark raw conflict, with even the slightest possibility of real medical aid scores of miles distant. It meant carrying the wounded over miles of brutal country, through heat and rain and the cold of night. It meant that the only aid was the first aid given by a pharmacist's mate. It meant that body wounds were terribly dangerous, because the victim had to be flown to the base hospital in Managua, after having been jostled and lugged by hand for hours and miles and it meant that the wounded man, if brought to a post where there was an aviation field, remained there until daylight, because night flying in Nicaragua in those times was just plain suicide.

Attempting to move in secret was just about impossible. The age old grape vine went into action telling the story of the patrol. Sometimes they used a large hollow log to bang on and the mountain air carried the sound for miles. Other times it was from mouth to mouth, a man standing on a hill and calling out to another, some distance away. No words, just a long cry. At night the system of building a fire inside a shack in the clear was employed. The fire was built in a pit in the floor, a blanket was placed over the window on the side toward which the patrol was moving, and then the flame was exposed to the watchers and as acknowledgment was given, by the same means, the message went out. Raise the blanket over the window, blot out the light, lower it and the flame winked, then blotted and so till the message was complete. The location of shacks such as these was so that if search was begun at night in an attempt to prevent the act, just the dousing of the fire was enough to make it impossible to locate it. During the day a patrol stood out like a bloody thumb in the snow easy to spot from miles away. At night any attempt to sneak up on a town was frustrated by the master sentinel of them all, the mongrel dog. These curs, with their supersensitive noses and ears picked patrols up half a mile away, and sometimes farther than that. First one bark, then another, then more until the unholy chorus filled the night, getting louder as we approached, then meeting us at the edge of town, a sniffing suspecting pack, yapping as we scattered them with rifle jabs and curses. Any chance of surprise was nil and the sound of dogs barking in the night brings back, to me, vivid memories.

Toward the close of the campaign the guerrillas became possessed of many modern weapons and at times were in command of greater fire power than the Marines and this many times over. They learned from their experiences with Marine aviation not to travel in large groups and to meet at a certain specified place, traveling at night and in small groups. When an ambush was planned they gathered at the spot, under cover of night, and remained there, being liberally supplied with the world's only liquid fire that I remember seeing in bottles, casusa. When the engagement had terminated, they fled as individuals or by twos or threes and hid out, until dark, at which time they trekked home and resumed the disguise of a poor downtrodden mozo, bearing the white man's burden.

Now all these things are done with. Yet the teachings of the men who learned the hard way by blood and sweat are ever green within the mind. Remember what they told you about the rifle grenade? Not to fire it until you'd looked up and made sure that there was no overhead obstruction to bounce it back in your lap? And the precaution to be taken before throwing a hand grenade, "Draw the hand to the rear, fully, once, twice then when


**HAWLEY TROPPER SUN HELMETS**



MANUFACTURERS OF
HEADWEAR FOR THE U. S. MARINE CORPS
HAWLEY PRODUCTS CO.
ST. CHARLES, ILLINOIS

TREDEGAR COMPANY
(Tredegar Iron Works Established 1836)
RICHMOND, VIRGINIA

✦ ✦ ✦

MAKERS OF
PRACTICE TARGET PROJECTILES
for the United States Army and Navy

you're sure that no snag or limb will knock it out of your hand pull your hand back and heave it." Especially valuable precaution at night or in a ditch or trench. And learning to ride. That was simple. All you did was crawl up on the apple knocker. He threw you off and you dusted yourself, climbed on again so that he could throw you off again and so till you learned. Outwitting the pack mule was a game of skill and speed. You threw the apparejo on his back, went to get the bullbags, dropped the cinch around his barrel and then the fun began. The jarhead filled his belly with ozone never batting an eye. If the packer was a tyro he cinched his buddy up and wondered 15 minutes later how the bullbags and apparejo got under the walleye's stomach. He learned after soul searing experience. And when he learned, he just put the apparejo on placed the cinch loosely around Dopey's belly, then after getting the lines in position for a fast hitch, turned and gazed toward the far horizon. After Knucklehead had satisfied himself that the time wasn't yet ripe for the air trick, the packer whirled with lightning speed, kicked Mr. Mule right square in the belly, driving all the wind out of him in one great whooshing sigh and before the animal could make himself believe such treachery, he was roped, tied and secured to that pack. Woe unto the traitor should he come within range of the betrayed critter's dainty feet, or dice size teeth. Mules have been the inspiration for the world's most renowned cussers and the Nicaraguan mule can take his bow for the superb job he did on the Marine vocabulary, second to none in this world.

The end of this article is come. It was not meant as a lesson in this type of warfare or an attempt to advance a theory. It was only a lot of fun, recalling things that the writer saw and heard in the all too short period spent in Nicaragua. There are so many individuals, officers and enlisted men whose experiences during the campaign are gathering dust in the recesses of their minds. Reference isn't being made to actual blood and thunder experiences so much as to those of practical value, for who knows what the future holds.

This I do know. The Marines brought order to Nicaragua, brought it progress, supplied it with a well trained force of native police, perfected the art of dropping supplies to ground troops from the air, pioneered the route that Pan American Airways now uses and won the respect of those Nicaraguans to whom the peace and prosperity of their country meant more than the natural resentment toward foreign troops.

Perhaps there shall be no more lawlessness in these countries, perhaps, as in the growth of the West, the building of roads and the advance of the railroads will drive the marauder ever further into the hills until he and his type ceases to exist.

Until such time the breed that roamed the hills and mountains of Nicaragua and surmounted such tremendous obstacles must never and will never forget the lessons learned nor hold too lightly the part played in helping keep the security that national safety demanded. And if the time comes when Marines must again carry the beacon of law and order in the common cause of justice, so that we Americans may live in the peaceful assurance that this law and order is not being established by those who might do us harm, they will be found ready and willing, worthy of those who have gone before them.

## THE SQUAD AUTOMATIC

(*Continued from page 39*)

port by the artillery and the infantry auxiliaries to the rear. The last two or three hundred meters before the enemy position are the hardest. Here, the infantry must help itself with what it has. . . . There are now only two possibilities—either the attack breaks down under the weight of defensive fire effect, or it finds in its own resources the power to carry the men forward to assault at close quarters.

"An infantry that believes that it is no longer able to undertake a decisive attack by its own power has, to a great extent, lost its meaning . . . . .

"The infantry must be strengthened in its attacking power. That is and will remain the most urgent requirement of the moment. To imagine that the limits have been reached, however, is to misunderstand the essence of technology, and to under-rate the fundamental importance of the infantry as part of the army organization."

## CATERPILLAR DESCRIBES DIESEL VALUE

How the problem of low-cost, dependable standby power has been solved by the medium-speed, heavy-duty Diesel engine, is told in a pamphlet printed by Caterpillar Tractor Co.

Pointing out that to provide complete protection against interruption of service due to main power failure, standby power must be capable of meeting any emergency. "Caterpillar" lists and photographs a wide variety of actual, successful installations.

Standby power must be able to go into service immediately and operates for minutes, hours or days at a time, if the emergency requires it, the booklet says. "It should have the same assurance of continuity as if the service were continuous."

The booklet, Form No. 6537, can be obtained by writing Caterpillar Tractor Co., Peoria, Illinois.

In a recent search into the history of the earliest-built "Caterpillar" Diesel tractors, the company found that of the first 25 manufactured, 24 are still operating, either as tractors or power units.

The case records of these 25 early machines make up a 16-page booklet of unusual interest. For example, the first practical Diesel tractor ever built went to work in 1931 pulling a blade grader in a road construction job. Ten years later, it's still in operation, loading logs onto a truck for a lumber company in California.

"Caterpillar" has listed each case history with photographs of the machines described. The action pictures are accompanied by a record of the tractor's hours of operation, fuel cost; and wherever possible, maintenance and repair charges.

Copies of "The First 25 'Caterpillar' Diesels," may be obtained by writing Caterpillar Tractor Co., Peoria, Illinois, and requesting Form 6539.

# THE WHITES OF THEIR EYES

(*Continued from page* 18)

eral others, our forces abroad in 1917-19 were generally below good military standard as marksmen.

In our war with Spain only the small body of regulars acquitted themselves as shots and it was only because the Spanish troops were so badly officered and trained that our Guard and Volunteer regiments were better in comparison. Our early forces in the Civil War were termed by Count von Moltke, a German observer, as mere armed mobs without rifle training and it cannot be questioned that a large initial advantage of the South was the fact that a great many of its troops were accustomed to firearms while those from the North were not.

Our Revolutionary, War of 1812, and frontier troops of early days were most indifferent marksmen except for small bodies of regulars and special rifle companies recruited from Indian fighters. General Washington's comments on the ability of militia and Minute Men in this regard are far from flattering. It is close to the truth to say that *in the past* our Army direction has never had the time, the equipment, the ammunition and, perhaps, not even the inclination to make shooting ability a matter of vital training for *war-time levies* of troops. I have very recently seen the spectacle of Reserve Officers being called to active field duty and taking private instruction on how to shoot a pistol.

Any national inability to handle firearms can well become the serious problem that is now confronting Great Britain where there is a crying need for riflemen and pistoleers to face a German army in which practically every man from infantryman to truck driver has been taught small arms marksmanship. And Britain must strive frantically to overcome a condition of mass ignorance regarding elemental phases of gun safety and use even as she pleads with American riflemen to send her civilians the small arms and ammunition which are not found in England—a condition brought about by previous red tape and restrictions on the use and ownership of firearms.

Britain, however, is now definitely arming her civilians and teaching them to shoot. Colonel Rainford, attached to the Office of the Military Attache of the British Embassy in Washington, stated recently:

> "The English citizens now know what a Blitzkrieg is and they are no longer afraid. They are going about their business in the same old ways but are spending their week-ends on the rifle ranges."

There they have to dodge bomb splinters and spent machine gun bullets from antiaircraft fire, for which the club secretaries apologize with the usual English aplomb, and they have even asked for postal matches with American clubs!

Here in the United States the British and Continental lessons are being ignored. In our large urban centers it has become almost impossible for the average citizen to learn to shoot. Whatever native ability in firearms our men and women may have is being officially stifled by increasing onerous laws against their use and possession. Police and prosecuting authorities linked with crime prevention bodies, anti-Fifth Column groups, city councils, state legislatures and Congress, have been steadily restricting the legitimate use of firearms. There is excellent evidence, to quote the editor of *The American Rifleman*, that a politically skillful group intends to put over new firearms permit and registration bills in each of our state legislatures this year. Already many such bills have been offered. Statements about the need for such laws because of Fifth Column activities are being issued. Perhaps the peak of illogic in this respect was reached in a recently proposed Federal law that would require every one owning a gun or rifle to keep it in public armories, to be guarded presumably by aged political appointees. Nothing would suit Fifth columnists better than to have large caches of arms available for seizure as was exactly the case in Norway. The Swiss know better—each citizen keeps his gun at home in prime condition for use.

While rifles may be openly bought today, learning to shoot one in such large cities as New York is something else again. In Manhattan there is only one public range

**LINCOLNSFIELD**
**UNIFORM FABRICS**

**Serge** **Whipcord** **Elastique**

**MIDDLESEX AND EMBERTON**
**UNIFORM CLOTHS**

**Dress Cloths** **Overcoatings**

**D. R. VREELAND, *Sales Agent***
**261 Fifth Avenue**
**NEW YORK CITY**

**ASHLAND PAPER MILLS**
**INC**

**ASHLAND, NEW HAMPSHIRE**



XUM

to my knowledge, that one of 75 feet, indoors. The National Guard armory ranges which were formerly open to rifle clubs are now closed to them. It is illegal to fire a rifle of even 22 calibre in the county limits. Air guns are not permitted. One may not shoot in his basement or in his attic. He may not keep a loaded rifle in his home or carry one in his car. Rifle clubs are not encouraging new membership because they have no range facilities. As far as pistols and revolvers are concerned they are completely taboo for the ordinary citizen, and even an Army Reserve Officer requires a permit for one.

Such complete restrictions do not exist in smaller towns and communities where many active rifle clubs are in operation. Yet these are being restricted. All this contradicts the bitter experience of Europe and particularly of England where civilian target practice is going on everywhere. Over 3,000 rifle clubs are now in existence. For our great area we do not have as many active groups.

The evidence of the 1940 warfare shows that the expert rifleman as a soldier, a free lance or bushwhacker, lacking everything else but skill, gun and ammunition, can be a tremendous factor in defense. He is no longer regarded as obsolete. Rather he has achieved a new significance. In the new military tactics the infantryman, more than at any time since the French and Indian wars, is an individualist. With the wide interval required by modern tactics, the new split-up into small units, he is further removed from his officers than ever before. He must believe in himself and he must believe in his rifle. He must know he can deliver deadly individual fire if he is to be effective. That old, familiar theory of army commands that training in individual marksmanship is a waste of time, and that fast fire, volume of fire, constitutes fire power is a theory that has been disproven at the cost of thousands of lives in every war we have fought according to an eminent authority on small arms shooting.

Volume of fire to stop attack of massed infantry has been the fetish of military commands for generations, both abroad and in our own Army. But a weight of infantry did not come in 1940. Instead automatic riflemen dropped down from the skies, and a comparatively few thousands of troops, encased in armored vehicles rumbled down many unprotected routes so quickly that artillery fire could not be brought against them. The British in Belgium had a thoroughly protected front against such attack but when the Belgian and French supporting flanks broke, the British had to abandon their prepared position.

Accompanying these moving casements were companies of cycle troops and mechanized engineers who like parachutists are particularly vulnerable to accurate rifle fire. They scout for tanks and repair terrain whenever they are halted by broken bridges, flooded ground, mine holes, obstacles and other features of what is called "passive resistance." In difficult country, tanks cannot advance without such accompanying troops and therein is a weakness. Men on foot must be out and around tanks to help them.

The tank machine gun is not an accurate weapon when the tank is hoving. It serves against masses of troops but not against small protected groups, nor against attackers at a few yards. The tank is exceedingly dangerous at 300 yards but defenseless at two. Fuel capacity is less than 100 miles of battle running. One theoretical method of incapacitating tanks is to keep the operators inside by expert rifle fire. A story is told of four British infantry who stalked an isolated, partially disabled tank for three hours, shooting the occupants one by one as they tried to emerge at various times. Definite procedures have now been worked out according to the *Infantry Journal* for foot soldiers to combat tanks successfully.

Contemporary accounts of officers and men on the French and Flanders fronts in 1940 indicate that if the Allies had had the same ability to shoot accurately characteristic of the Swiss and Finnish militia, plus an armed civilian populaton, the Allied debacle might have been considerably modified. In many local actions it seems to have been but a question of delaying the advance of fairly thin bodies of German mechanized troops for an hour or so until reinforcements or reorganization of the defense could have been had. There are numerous authentic stories of parachutists or a few German tanks or even platoons of cyclists occupying centers far in advance of the German main bodies. Maurois in his book, "The Tragedy of France" (Harpers), tells of small forces of cyclists taking over French railway stations miles inside the French lines. He cites the case of English engineer troops attacked by such a body and then rallying to kill them off one by one with picks and shovels. If a pick handle could stop such enemy tactics what could a few strategically placed civilian or army sharpshooters have done?

The audacity of German parachute and cycle troops behind the Allied front was amazing. They took tremendous risks and got away with them because the civilians behind the lines did not have the courage and arms to confront them. Great Britain, however, is rapidly changing that condition.

The Germans alone among nations seem to plan war by setting up new and devastating methods and ideas. We others seem to plan it by trying to improve on old schemes. "The only one certain thing about war" states Colonel Phillips in a recent sensational article in the *Infantry Journal,* "is change . . . the traditionalist is certain to be wrong all the time." The Allies of 1914-18 read the lesson of those years as requiring heavy volume of fire from armored casements and forts — defense, in other words, against massed infantry. The American Army held such a tradition or rather the idea of great volume of fire rather than accuracy. The statement is made in some American military text books that it is unimportant to teach marksmanship to soldiers because under ordered or timed fire the number of hits on an enemy would be greater with poor shots than good ones because of the dispersement due to inaccuracy. Such a theory is spiritedly disputed by riflemen both in the Army and out. Captain S. R. Shaw in a recent authoritative article in THE MARINE CORPS GAZETTE, reprinted in the January *American Rifleman,* covers most thoroughly the whole history of *accuracy vs. volume* of rifle fire and arrives at the very definite conclusion that accuracy can get results where volume cannot and he insists upon thorough rifle training for all troops. The author is much indebted to Captain Shaw for part of the data herein.



XUM

Evidence is conflicting as to the stress now being put upon marksmanship in training our new troops. Published reports of target ammunition used at Camp Dix were astonishingly large yet at the same time it has been stated some National Guard divisions are being allotted only 90 rounds per man. It would be interesting if the Army's new Bureau of Public Relations would release definite data on this point together with the numbers of the men qualifying as marksman, expert and sharpshooter. Let us hope that unfortunate cover of *Life* which showed a straight standing, sailor trainee, rifle on his shoulder but with the sight leaf missing, is not symbolical.

If we do not have tanks, planes or cannon let us have at least every combat soldier a marksman even though he is short on close order drill. The American public can certainly ask such partial insurance against the contingency of surprise attack before our military is otherwise fully prepared. The Army states it is putting emphasis on fire power in training our troops so as to effect a large decrease in the number of men needed to attack or defend. The Garand rifle, concerning which there has been so much controversy, is being put into the hands of proportionately a large number of men although production of these pieces is slow. The Springfield still remains our principal small arms weapon.

The Marine Corps, after long investigation, has just adopted the Garand but the full report of its tests indicate very definite deficiencies as far as its use off the range is concerned.

A criticism also exists as to the limited supply of ammunition carried by troops using the quick firing Garand, a situation which should necessitate that soldiers using it be essentally marksmen. Is it too much, therefore, for us to insist that general features of troop training be curtailed in order to perfect our infantry in accurate rifle fire as soon as possible?

The need for a civil population trained to arms and the great value of having civilian marksmen was demonstrated long before guns were used. The English long bowmen were yeomen, farmers expert in the use of the long bow. The English law required every male to constantly practice its use and matches were a great part of countryside activity. We need only recall the Robin Hood stories. Prowess with the bow made any man an honored person. In consequence the English archers for nearly a century had no counterpart in Europe and they won battle after battle for England.

The Swiss have accepted this idea for centuries. They have probably the finest defensive militia in the world. Every citizen must qualify in marksmanship annually with his rifle and must, of course, serve in time of war. Rifles, bayonets, and 120 rounds of ammunition are kept at home (not in armories) and target practice, if only "dry" shooting, is almost a daily task. It is stated that 500,000 Swiss militia with arms can be thrown into the field in twelve hours. The 120 rounds per man, according to a Swiss officer, are "enough to get 121 invaders because we don't miss and because we can 'shoot billiards.'" That is a broad statement but it has a large basis of fact.

Finland also has a superfine militia system based on shooting prowess. There is hardly a village in Finland without its own rifle range and gunsmith. Up to 15,000 militia rifle matches were held a year. The result was incredible feats of marksmanship against the Russians when the Finns inflicted casualties in the ratio of ten to one received. One sergeant-major dispatched 41 Russians with 45 shots. Another man in the same body of troops shot not less than 80 of the enemy. It is told that the Russians froze to death in the fox holes rather than move an arm or leg against the deadly Finnish fire. Only when their ammunition ran out did the Finns start to lose.

A similar situation existed with the Boers in their two wars with England. Details of the repeated demoralizaton of British troops caused by the phenomenally accurate fire of the vastly less number of Boer troops can be cited for pages. Only one comment perhaps is needed, that of Colonel Balck, a German observer in South Africa, who wrote: "The British were paralyzed for ten hours by rifle fire commencing at 1,000 meters." That is an extreme range for rifle shooting.

American history has also some examples of the value of accurate rifle work, demonstrated perhaps no better than at the battle of New Orleans in 1815. Here we had an adequately commanded force of backwoods rifle marksmen, not just frontier farmers. The British troops, veterans of the Peninsula, lost 2,000 men, mostly killed. Our losses were 71 killed and wounded. The veterans never got close enough to use their bayonets.

The Texans at the Alamo, with Davie Crockett and Jim Bowie, were good shots. A hundred and fifty of them fought somewhere around 5,000 Mexican soldiers for thirteen days. Crockett probably accounted for more than fifty killed himself. Surrounding his dead body at the final stand were seventeen Mexican soldiers. We had some exceptional shooters in 1917-18 too.

"Largely because of Private York's exceptional coolness and *skill* with firearms" states the official account of the exploit of our best known AEF hero, "his regiment was able to continue its advance for the day." His expert shooting killed more than fifteen Germans, wounded a number of others and brought such complete demoralization that 132 Germans with five officers surrendered to his small squad!

In 1918 the accurate firing of the Marine Brigade in France, according to Captain Shaw, caused the Germans to report that the Marine fire was the most stupefying factor they had encountered in the whole war. They stated,


IT'S "U. S. INSPECTED"

Silver Nip
GRAPEFRUIT JUICE

FLORIDA FRUIT CANNERS
INC.
FROSTPROOF, FLORIDA




XUM

erroneously, that they were opposed only by expert snipers. The veteran British army that retreated from Mons in 1914 owed its survival and possibly the saving of the war at that time to the fact that these British troops were perhaps the best trained shots among the military of the nations then engaged. Their fire was so deadly the Germans thought they were opposed by machine gunners. However the newer armies that came to the front both British and Americans had in no wise the accuracy of fire of the Regulars.

The French during World War I apparently could not shoot, did not trust a rifle and never had much target practice. General Pershing relates how they would chase a German and try to get close enough to throw a hand grenade rather than trust their rifles to get him down.

The new 1939 German armies are reported to have had intensive rifle training beyond anything of the past. The German command has taken the rifle as its important weapon. Even artillerymen and air corps ground forces are so armed. Marksmanship has been thoroughly taught and time spent on close order drill materially reduced. Captain Shaw states that some units had as much as two days a week target practice regularly. In contrast he gives the rifle training of our war-time levies in 1917 as but 7% of training time, a period so limited as to require a "lifetime" to learn to be accurate. The new German trooper is thus a vastly different soldier from his father and his opponents in 1917.

It might be noted, however, that Major McBride, head of the Canadian sniper force in 1915, states the Germans issued 20,000 high power sporting rifles equipped with telescopic sights to snipers in 1914. The subsequent casualty lists of British commissioned personnel shocked England. Finally the British had to set up counter sniping units which became as effective as the Germans.

Expert riflemen, it might be noted from all the above data, can inflict damage far beyond their numbers because the weight of metal required in warfare to kill or wound through average military fire is astoundingly great. There is a true maxim that a soldier must shoot his weight in lead to damage an opponent. Taking the official statistics of all small arms ammunition fired by our troops in 1917-19 against enemy forces (304,677,672 rounds) as against the closely estimated German casualties resulting from such fire (rifle balls including machine gun bullets) gives the total of an average 6,000 American rounds to inflict each enemy casualty. This also takes into account a proportion of wounds from "small missiles unknown." With military bullets running about 35 to the pound we thus have the weight of a husky soldier.

One military textbook estimates that fairly good mass infantry fire should attain 310 hits out of ten thousand rounds against a single kneeling line of enemy. The extent to which marksmanship of the highest order changes this ratio is shown by the fact that expert Service rifle teams can score a proportion of over 9,000 hits per 10,000 shots at this distance. No troops the world has ever known could stand up against such fire.

In older days when there was no machine gun wastage, the average number of rounds fired to inflict a casualty was very much lower and the bullets heavier. At the battle of Vittoria in the Peninsular War, the British records show their soldiers fired 4,350,000 cartridges to inflict an estimated 4,000 casualties from musket fire. Thus not more than one out of a thousand bullets took effect at the short ranges of that day. An official statement of 1803 cites the very minimum of 500 rounds as necessary per enemy hit. The Colonists of 1776 did not have to be very good shots to get down a British trooper before he could get in his average!

Of course this refers to the timed fire characteristic of tactics then but the majority of our Revolutionary shots were not much better. Few realize that the old legend of Breed's Hill—"Don't fire boys till you see the whites of their eyes!" was addressed to Massachusetts' farmers and townsmen who perhaps could not hit an enemy much beyond that distance. The official records of our War Department relative to the inefficiency and apparent lack of ability with firearms of our Revolutionary and frontier militia are indeed startling. The familiar idea of the Colonists sleeping beside their muskets, trained to use them and springing up to defeat the English is sadly dissipated by General Washington himself, in a letter of September 24th 1776 to the President of Congress. He wrote of the Continental militia:

> "Men just dragged from the tender scenes of domestic life, unaccustomed to the din of arms, totally unacquainted with any kind of military skill (which is followed by want of confidence in themselves when confronted by enemy troops) are timid and ready to fly from their own shadows."

In the War Department records are accounts of sixty or more thousands men of Kentucky, Ohio, West Virginia and Illinois called up during the War of 1812. These states then were wilderness territories inhabited fictionally by only Daniel Boones. As militia they repeatedly broke before very much less numbers of British, Canadians and Indians—in fact they never won a battle against the 800 English veterans who were the only regular troops confronting them. We find little record that our frontier populations on the whole could shoot. Thomas Jefferson was so thoroughly outraged that he wanted a forced draft of our citizens. He wrote James Madison in 1814:

> ". . . we must train and classify the whole of our male population and make military instructions a regular part of collegiate education."

So much for the records—the thing that now may count tremendously in 1941 and 1942 is that the American people take the lessons of Europe most seriously, particularly the evidence in Britain where civilian martial aid is counted upon as an important part of defense at spots where there may not be sufficient troops. Our potential invasion front is many times greater than Great Britain's, and today we have no certain guarantee that our naval and military establishments alone can cope successfully with the most ingenious, ruthless, efficient and best armed powerful opponent to raise itself against us in all our history. We must do more than bank on Providence as we have in the past.

If our homes and liberties are worth the personal sacrifice we might have to make to save them, then we can well get our soldiers and civilians "accustomed to the din



XUM

ot arms and acquainted with their effective use," without delay, regardless of any discouragement from confident military or civilian authorities. Above all else Fifth Column propaganda should not be permitted to take our weapons from us or restrict us any more in their use through new statutes.

It requires practice to kill effectively with any firearm but learning is not hard. Daniel Boone could easily hit the inside of a playing card at 80 paces off hand shooting. That was excellent in its day but our modern shooting records are almost incredible to the layman. We will take just one instance. The official 100-yard small bore (.22 cal.) target has a 10 bullseye ring of but two inches diameter. Within that is an X ring of inch width. Try looking at such a spot 300 feet away. Yet the winners in the National Matches at Camp Perry in 1940, shooting prone, not alone put 40 shots out of 40 into the 10 ring but ran up as high as 30 of these in the X ring! To such marksmen the eye slits of tanks are not impossible targets.

Any mayor, sheriff or governor can set in motion a serious effort to teach civilian marksmanship to his citizens. Under such patronage rifle clubs can be set set up or expanded. Trap shooting is not much of a help however. The National Guard armory ranges can be opened up for purely American civilian clubs. Police investigation can establish their bona fides. Ballyhoo and publicity can encourage men and women to join, to buy rifles and to achieve shooting and defense efficiency. The WPA can be utilized to build new outdoor ranges. From existing clubs instructors can be obtained. Ammunition can be had by public subscription. Rifles can be donated, already the Committee of Defense of British homes has had nearly four thousand guns contributed to it by Americans.

While some Army officers maintain that proficiency with a .22 calibre rifle is of no use for military shooting, this opinion is at complete variance with that of a well known expert rifle coach who states:

> "A shooter who has well learned the small bore rifle can take up the .30 calibre and shoot relatively as well with it from the very start. . . . Several years ago two skilled small bore shots who had never shot the .30-06 before, on their very first day with it broke the World's Record at 1,000 yards!"

Already in some American localities serious organization of civilians has been had. At Westfield, New Jersey, for instance, the Mayor and a retired Army colonel have developed a complete defense program for the town with marksmanship an important part of the training. The town itself appropriated $5,000 to buy ammunition, pistols and rifles for the several hundred citizens of its trained Reserve including a hundred or more women. Plans have been drawn and training exercises held for defending the city's danger points—the gas tank, the water reservoir, the railroad station and the like. All civilian weapons have been checked for availability and put in good order with ammunition available.

This may all seem a bit silly to some but certainly not to the citizen who is paying in addition to all new taxes a 10% "defense" tax increment on his income tax blank. Defense of what, it may be again asked, if not of our towns, cities and villages? Five thousand more Westfields still have time to learn before the two oceans that separate us from our potential foes become ineffective defense barriers as the Polish mud, the opened dykes of Holland, the Meuse River and the Maginot Line.

---

## NOTES ON GERMAN TRAINING

(*Continued from page* 16)

If water is to be prepared for issue to marching troops, a non-commissioned officer with some men on bicycles should be sent ahead with the company canteens. If the march rate is decreased voluntarily, it is possible to serve all men, but whether a decrease is permissible depends upon the situation. Even during this war pumps have been poisoned, and this fact must be taken into consideration. It is an exaggeration to state that a company will get entirely out of hand while being watered, although if water is not immediately available some men may leave the column momentarily to get it. Such men should be arbitrarily punished.

In addition to an extended midday rest, troops should have rest periods covering the last ten minutes of each hour, and such periods should be made uniform throughout the entire column. These rests have proved their value during this war. At first troops objected to the short periods; they preferred to go on marching, but they soon realized that short and regular halts improved their marching performance.

The French have used the ten-minute rest periods in their marches for a long time. This accounts for the slower marching rate of the French infantry.

Many commanders prescribe that the rifle be carried in a uniform manner, but this provision fatigues personnel unduly and unnecessarily. The manner of carrying the rifle should be optional, as permitted by our training instructions. It is true that the company will not present a uniform appearance, but that is not the main purpose of a march into combat.

Men with sore feet are always a problem on a march. Mounting them on vehicles is not always practical or expedient, for there are only a few unoccupied seats on battalion vehicles. The regular peacetime soldier shuns rid-


# INSURANCE

**is man's most valued possession.**

**Navy Mutual Aid Protection**

**is your most valuable policy.**

***Commercial insurance benefits plus***
***Navy Mutual Aid service.***

**ROOM 1535, NAVY DEPARTMENT**
**WASHINGTON, D. C.**




XUM

ing as a matter of pride; he does not want to be known as a man who "can't take it." But a difficult situation obtains with unconditioned conscripts, and the few available seats are soon occupied. Generally it is better to collect those who "can't take it" and leave them in a village under the command of a reliable non-commissioned officer. These men should continue the march on the next day. If a man knows that he must march in any case, he will strain every nerve in order to remain with the company.

If munition and tool wagon horses are lacking in marching ability, it is hardly due to a deficiency in horse-training or driving instruction within the battalion. Poor marching performance on the part of animal transportation may be due to one or more of the following:

a. Horses are unconditioned and too young;
b. Drivers are insufficiently trained in driving and handling horses;
c. Vehicles are overloaded;
d. Roads, weather, or both are bad.

In wartime we always have to take these factors into consideration. The adoption of lighter and smaller vehicles may be the final solution, for they facilitate a good march even in the face of unfavorable conditions. Pneumatic-tired vehicles may be hard to pull on soft footing, but they are correspondingly easy to pull on hard footing. They possess so many other advantages that they should be retained.

### 2. COMMENT BY OBSERVER

This article is evidently based upon considerable practical marching experience in Poland, on the Western Front, or both. It is interesting to note that even in the German Army, where peacetime field training is designed to approach combat conditions as closely as possible, peacetime marching exercises did not completely prepare men and animals for the conditions actually encountered in war.

In combat, the size, weight, and distribution of the vehicle load were discovered to differ considerably from these factors in peace conditions.

The author notes that selection of routes, terrain, and weather conditions in peacetime marching exercises are generally based upon the comfort and convenience of the troops. This is likely to be detrimental to the training and conditioning of troops for the theater of war, where marching conditions are usually dictated by the enemy.

German officers have repeatedly stated that they found it to be a mistake for company officers to show too much sympathy and concern over complaints of sore feet, especially at the beginning of a long march. They found that such sympathy only encouraged more complaints. They do not, however, neglect such complaints altogether, for appropriate inspections of feet and footwear are made during halts and at the end of the day's march.

The importance of keeping the personnel of a marching unit in good humor and spirits is continually emphasized.

---

## "GUNS OR BUTTER"

(*Continued from page* 13)

adopted, this would be of benefit as a separate measure to prevent diversion of "likely" recruits with intelligence or clerical ability from the performance of line duty during a first enlistment, when they should, above all, be learning the fundamentals of Marine Corps training.

The primary benefit of such modifications of our present methods would be to return to full-time service with troops not only a large number of commissioned officers of all ranks, but many more noncommissioned officers and privates of ability and intelligence. If we reckon up the Marine Corps units served by individual exchanges, the total of officers and men released becomes impressive. Not including Fleet Marine Force exchanges in the calculation, the services of at least fifty commissioned officers would in whole or part be returned to military duties. Consider as well the requirement that until recently (when it was temporarily suspended) every second lieutenant, fresh from Basic School, must first begin correspondence-courses, not in the science of war, but in book-keeping and accounting.

The changes outlined above deliberately fail to exploit an entirely different possibility for regaining the military services of exchange personnel. Although it is admittedly an emergency-measure, formation of the nation-wide United Services Organization (the "USO") suggests that this large and worthy enterprise might, at least for the duration, take over operation of rear-area, stabilized exchanges (such as those listed in paragraph (a) of the modifications previously suggested). Such a shift would enable the establishments involved to operate just as economically as when conducted by Marine Corps personnel, for the philanthropic USO would of course bear the salaries and charges involved. At the conclusion of the emergency, the change could be made to outright paid-civilian management.

The immediate need for trained personnel, officers in particular, would seem in any case to justify diversion of post exchanges to civilian management for the present as an emergency-measure. In the future, as an ultimate end, such a change appears highly desirable, as General von Bechtolsheim (the author of our initial quotation) would undoubtedly agree. From what we now know of the complexity of war and of the intensity of effort which victory exacts, can we honestly conclude that even a year's service away from training for battle does not materially affect the efficiency of individuals concerned? Four-year enlistments, by foreign standards, are short enough as it is, and, while the limitation expressed in article 12-5 (1), Marine Corps Manual,[1] operates in some cases to return "career" exchange personnel to line duty, it cannot be said that an enlistment, three years of which have been spent behind a counter, is of *military* benefit to the Marine Corps, however efficient and loyal the individual may have been in the performance of his exchange duties. If the Corps were larger, more "overhead" could naturally be absorbed, but, in a select, hard-hitting force, supposed to be ready for immediate action, ought not every individual, whether commissioned or enlisted, to represent fighting-power in the day of battle?

---

[1] "No enlisted man will be detailed to duty in any one post exchange of the Marine Corps for a period of more than three years out of any six consecutive years."

# ORGANIZATION FOR GUERRILLA HOSTILITIES IN CHINA

(*Continued from page* 12)

bers should be organized in each area and district. This committee, the members of which are selected by the troops and the local political officers, should function as a forum for the discussion of both military and political matters.

All the people in an area should arm themselves and be organized into two groups. One of these groups is a combat group, the other a self defense unit with but limited military quality. Regular combatant guerrillas are organized into one of three general types of unit. The first of these is the small unit, the platoon or company. In each county three to six units may be organized. The second type is the battalion of from two to four companies. One such unit should be organized in each county. While the unit fundamentally belongs to the county in which organized it may operate in other counties. While in areas other than its own it must operate in conjunction with local units in order to take advantage of their manpower, their knowledge of local terrain, local customs, and their information of the enemy.

The third type is the guerrilla regiment which consists of from two to four of the above mentioned battalion units. If sufficient manpower is available a guerrilla brigade of from two to four regiments may be formed.

Each of the units mentioned above has its own peculiarities of organization. A squad, the smallest unit, has a strength of from nine to eleven men including the leader and the assistant leader. Its arms may be from two to five western style rifles, with the remaining men armed with rifles of local manufacture, bird guns, spears or big swords. Two to four such squads form a platoon. This too has a leader and an assistant leader, and when acting independently it is assigned a political officer to carry on political propaganda work. The platoon may have about ten rifles with the remainder of its weapons being bird guns, lances, and big swords. Two to four of such units form a company which, like the platoon has a leader, an assistant leader, and a political officer. All these units are under the direct supervision of the military commanders of the areas in which they operate.

The battalion unit must be more thoroughly organized and better equipped than the smaller units. Its discipline and its personnel should be superior. If a battalion is formed from company units it should not deprive subordinate units entirely of their manpower and their arms. If in a small area there is a peace preservation corps, a branch of the militia, or police, regular guerrilla units should not be dispersed over it.

The guerrilla unit next in size to the battalion is the regiment. This must be under more severe discipline than is the battalion. In an independent guerrilla regiment there may be ten men per squad; three squads per platoon; three platoons per company; three companies per battalion, and three battalions to the regiment. Two of such regiments form a brigade. Each of these units has a commander, a vice commander and a political officer.

In north China guerrilla cavalry units should be established. These may be regiments of from two to four companies, or battalions.

All these units from the lowest to the highest are combatant guerrilla units which receive their supplies from the Central government. Details of their organization are shown in the tables.

All the people of both sexes from the ages of sixteen to forty-five must be organized into anti-Japanese self defense units, the basis of which is voluntary service. As a first step they must procure arms, then both military and political training must be given them. Their responsibilities are: local sentry duties, securing information of the enemy, arresting traitors and preventing the dissemination of enemy propaganda. When the enemy launches a guerrilla suppression drive these units, armed with what weapons there are, are assigned to certain areas to deceive, hinder and harrass him. Thus the self defense units assist the combatant guerrillas. They have other functions. They furnish stretcher bearers to carry the wounded, carriers to take food to the troops and comfort missions to provide the troops with tea and porridge. If a locality can organize such a self defense unit as we have described the traitors can not hide nor can bandits and robbers disturb the peace of the people. Thus the people will continue to assist the guerrillas and supply manpower to our regular armies. "The organization of self defense units is a transitional step in the development of universal conscription. Such units are reservoirs of manpower for the orthodox forces."

There have been such organizations for some time in Shansi, Shensi, Honan, and Siuyuan. The youth organizations in different provinces were formed for the purpose of educating the young. They have been of some help. However, they were not voluntary and the confidence of the people was thus not gained. These organizations were not widespread and their effect was almost negligible. This system was therefore supplanted by the new type organizations which are organized on the principles of voluntary cooperation and nonseparation of the members from their native localities. When the members of these organizations are in their native towns they support themselves. Only in case of military necessity are they ordered to remote places and when this is done the government must support them. Each member of these groups must have a weapon, even if the weapon is only a knife, a pistol, a lance or a spear.

FAMOUS SINCE 1861

SCHRAFFT'S

CHOCOLATES

Fine Candies — Beautifully Packaged

The Perfect Gift for Any Occasion

W. F. SCHRAFFT & SONS CORP.

BOSTON, MASSACHUSETTS

*Makers of Fine Candies for 80 Years*



XUM

In all places where the enemy operates these self defense units should organize within themselves a small guerrilla group of perhaps from three to ten men armed with pistols or revolvers. This group is not required to leave its native locality.

The organizations of these self defense units is mentioned in this book because such units are useful for the purpose of inculcating the people with military and political knowledge, keeping order in the rear, and replenishing the ranks of the regulars. These groups should be organized not only in the active war zones but in every province in China. "The people must be inspired to cooperate voluntarily. We must not force them for if we do it will be ineffectual." This is extremely important. The organization of a self defense army similar to that we have mentioned is shown in Table 5.

In order to control anti-Japanese military organization as a whole it is necessary to establish a system of military areas and districts along the lines we have indicated. The organization of such areas and districts is shown in Table 6.

### Equipment of Guerrillas

In regard to the problem of guerrilla equipment it must be understood that guerrillas are lightly armed attack groups that require simple equipment. The standard of equipment is based upon the nature of duties assigned; the equipment of low class guerrilla units is not as good as that of higher class units. For example, those who do not have the duties of destroying railroads are not as well equipped as those who have that duty. The equipment of guerrillas can not be based on what the guerrillas want, or even what they need, but must be based on what is available for their use. Equipment can not be furnished immediately but must be acquired gradually. These are points to be kept in mind.

The question of equipment includes the collection, supply, distribution and replacement of weapons, ammunition, blankets, communication materials, transport, and facilities for propaganda work. The supply of weapons and ammunition is most difficult particularly at the time the unit is established, but this problem can always be solved eventually. Guerrilla bands which originate in the people are furnished with revolvers, pistols, bird guns, spears, big swords, and land mines and mortars of local manufacture. Other elementary weapons are added and as many new type rifles as are available are distributed. After a period of resistance it is possible to increase the amount of equipment by capturing it from the enemy. In this respect the transport companies are the easiest to equip for in any successful attack we will capture the enemy's transport. An armory should be established in each guerrilla district for the manufacture and repair of rifles and for the production of cartridges, hand grenades and bayonets. Guerrillas must not depend too much on an armory. The enemy is the principal source of their supply. For destruction of railway trackage, bridges, and stations in enemy controlled territory it is necessary to gather together demolition materials. Troops must be trained in the preparation and use of demolitions and a demolition unit must be organized in each regiment.

As for clothing minimum requirements, these are that each man shall have at least two suits of summer weight uniform, one suit of winter clothing, two hats, a pair of wrap puttees and a blanket. Each man must have a haversack or a bag for food. In the north each man must have an overcoat. In acquiring this clothing we can not depend on captures made from the enemy for it is forbidden for captors to take clothing from their prisoners. In order to maintain high morale in guerrilla forces all the clothing and equipment mentioned should be furnished by the representatives of the government stationed in each guerrilla district. These men may confiscate clothing from traitors or ask contributions from those best able to afford them. In subordinate guerrilla groups uniforms are unnecessary.

Telephone and radio equipment is not necessary in lower groups but all units from regiment up are equipped with both. This material is best obtained by contributions from the regular forces and by capture from the enemy.

In the guerrilla army in general, and at bases in particular, there must be a high standard of medical equipment. Besides the services of the doctors, medicines must be procured. Although guerrillas can depend on the enemy for some portion of their medical supplies they must, in general, depend upon contributions. If western medicines are not available local medicines must be made to suffice.

The problem of transport is more vital in north China than in the south for in the south all that is necessary is mules and horses. Small guerrilla units need no animals, but regiments and brigades will find them necessary. Commanders and staffs of units from companies up should be furnished a riding animal each. At times two officers will have to share a horse. Officers whose duties are of minor nature do not have to be mounted.

Propaganda materials are very important. Every large guerrilla unit should have a printing press and a mimeograph stone. They must also have paper on which to print propaganda leaflets and notices. They must be supplied with chalk and large brushes. In guerrilla areas there should be a printing press or a lead type press.

For the purpose of printing training instructions this material is of the greatest importance.

In addition to the equipment listed above it is necessary to have field glasses, compasses, and military maps. An accomplished guerrilla group will acquire these things.

Because of the proven importance of guerrilla hostilities in the anti-Japanese war the headquarters of the nationalist government and the commanding officers of the various war zones should do their best to supply the guerrillas with what they actually need and are unable to get for themselves. However it must be repeated that guerrilla equipment will in the main depend on the efforts of the guerrillas themselves. If they depend on higher officers too much the psychological effect will be to weaken the guerrilla spirit of resistance.

### Elements of the Guerrilla Army

The term "element" as used in the title to this section refers to the personnel, both officers and men, of the

guerrilla army. Since each guerrilla group fights in a protracted war its officers must be brave and positive men whose entire loyalty is dedicated to the cause of emancipation of the people. An officer should have the following qualities: great powers of endurance so that in spite of any hardship he sets an example to his men and is a model for them; he must be able to mix easily with the people; his spirit and that of the men must be one in strengthening the policy of resistance to the Japanese. If he wishes to gain victories he must study tactics. A guerrilla group with officers of this calibre would be unbeatable. I do not mean that every guerrilla group can have, at its inception, officers of such qualities. The officers must be men naturally endowed with good qualities which it is possible to develop during the course of campaigning. The most important natural quality is that of complete loyalty to the idea of people's emancipation. If this is present, the others will develop; if it is not present nothing can be done. When officers are first selected from a group it is this quality that should receive particular attention. The officers in a group should be inhabitants of the locality in which the group is organized as this will facilitate relations between them and the local civilians. In addition, officers so chosen would be familiar with conditions. If in any locality there are not enough men of sufficiently high qualifications for officers an effort must be made to train and educate the people so these qualities may be developed and the potential officer material increased. There can be no disagreements between officers native to one place and those from other localities.

A guerrilla group ought to operate on the principle that volunteers only are acceptable for service. It is a mistake to impress people into service. As long as a person is willing to fight his social condition or position is no consideration, but only men who are courageus and determined can bear the hardships of guerrilla campaigning in a protracted war.

A soldier who habitually breaks regulations must be dismissed from the army. Vagabonds and vicious people must not be accepted for service. The opium habit must beforbidden and a soldier who can not break himself of the habit should be dismissed. Victory in guerrilla war is conditioned upon keeping the memberships pure and clean.

It is a fact that during the war the enemy may take advantage of certain people who are lacking in conscience and patriotism and induce them to join the guerrillas for the purpose of betraying them. Officers must therefore continually educate the soldiers and inculate in them patriotism. This will prevent the success of traitors. The traitors who are in the ranks must be discovered and expelled, and punishment and expulsion meted out to those who have been influenced by them. In all such cases the officers should summon the soldiers and relate to them the facts, thus arousing in them hatred and detestation for traitors. This procedure will serve as well as a warning to the other soldiers. If an officer is discovered to be a traitor some prudence must be used in the punishment adjudged. However, the work of eliminating traitors in the army begins with their elimination from among the people.

Chinese soldiers who have served under puppet governments and bandits who have been converted should be welcomed as individuals or as groups. They should be well treated and repatriated. But care should be used during their reorganization to distinguish those whose idea is to fight the Japanese from those who may be present for other reasons.

TABLE 1. ORGANIZATION OF AN INDEPENDENT GUERRILLA COMPANY

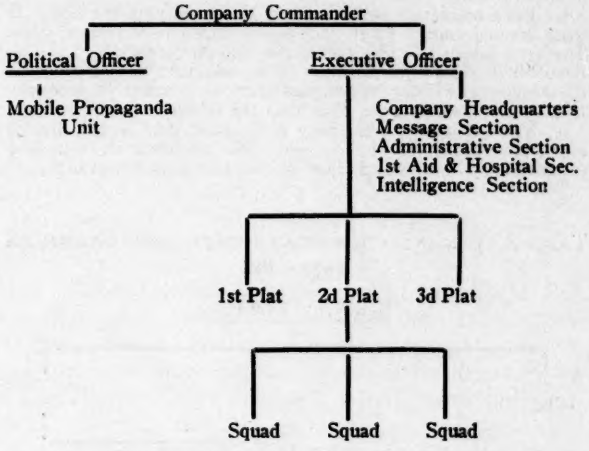



TABLE OF ORGANIZATION, GUERRILLA COMPANY

| *Rank* | *Personnel* | *Arm* |
|---|---|---|
| Company Leader | 1 | pistol |
| Political Officer | 1 | pistol |
| Executive Officer | 1 | pistol |
| Company Headquarters: | | |
| Message Section Chief | 1 | ----- |
| Signal | 1 | ----- |
| Administrative Section Chief | 1 | rifle |
| Public Relations | 3 | rifle |
| Duty Personnel | 2 | ----- |
| Barber | 1 | ----- |
| Cooks | 10 | ----- |
| Medical Section Chief | 1 | ----- |
| Assistant | 1 | ----- |
| 1st Aid & Nursing | 4 | ----- |
| Intelligence Section Chief | 1 | rifle |
| Intelligence | 9 | rifle |
| Platoon Leaders | 3 | rifle |
| Squad Leaders | 9 | rifle |
| Nine Squads, of eight | 72 | rifle |
| Total | 122 | 3 pistols<br>96 rifles |

THE PURE OIL CO.
CHICAGO, U. S. A.
A Complete Line of
INDUSTRIAL PETROLEUM PRODUCTS
MOTOR OILS ★ GASOLINES
Be sure PURE with Pure



XUM

## NOTES

1. Each squad consists of from nine to eleven men. In case men or arms are not sufficient the third Platoon may be dispensed with, or one squad organized as company headquarters.
2. The mobile propaganda unit consists of members of the company who are not relieved of primary duties except to carry out propaganda when they are not fighting.
3. If there is insufficient personnel the medical is not separately organized. If there are only two or three medical personnel they may be attached to the administrative section.
4. If there is no barber, it is unimportant. If there is an insufficient number of cooks any member of the company may be designated to prepare food.
5. Each combatant soldier should be armed with the rifle. If there are not enough rifles, each squad should have two or three. Shotguns, lances and big swords can also be furnished. The distribution of rifles does not have to be equalized in platoons. As different missions may be assigned platoons it might be necessary to give one platoon more rifles than the others.
6. The strength of a company at the most may be 180, divided into twelve squads of 11 men each. The minimum strength of a company may be 82 men divided into six squads of 9 men each.

TABLE 2. ORGANIZATION OF AN INDEPENDENT GUERRILLA BATTALION

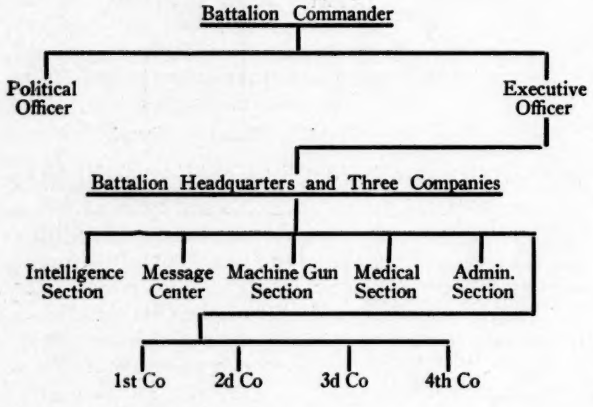



TABLE OF ORGANIZATION, GUERRILLA BATTALION
(Independent)

| *Rank* | *Personnel* | *Arm* |
|---|---|---|
| Battalion Commander | 1 | Pistol |
| Political Officer | 1 | Pistol |
| Executive Officer | 1 | Pistol |
| Battalion Headquarters: | | |
| Signal Section | 2 | — |
| Administrative Section | | |
| Section Chief | 1 | Carbine |
| Runner | 1 | Carbine |
| Public Relations | 10 | Carbine |
| Duty Personnel | 2 | — |
| Barbers | 3 | — |
| Supply | 1 | — |
| Cooks | 10 | — |
| Medical Section | | |
| Medical Officer | 1 | — |
| Stretcher Bearers | 6 | — |
| Nursing | 4 | — |
| Intelligence Section | | |
| Section Chief | 1 | Pistol |
| Intelligence | 30 | Pistol |
| Machine Gun Section | As Avail. | As Avail. |
| TOTAL, Headquarters | 75 | 34 Pistols<br>12 Carbines |
| Three Companies (122) | 366 | 9 Pistols<br>288 Carbines |
| TOTAL | 441 | 43 Pistols<br>300 Rifles |

## NOTES

1. Total Headquarters, Independent Guerrilla Battalion may vary from a minimum of 46 to a maximum of 110.
2. When there are four companies to a battalion, regimental organization should be used.
3. Machine gun squads may be heavy or light. A light machine gun squad is from 5 to 7 men. A heavy machine gun squad is from 7 to 9 men.
4. The Intelligence Section is organized in from 2 to 4 squads at least one of which is plain clothes men. If horses are available, one squad should be mounted.
5. If no men are available for stretcher bearers omit them and use the cooks or ask aid from the people.
6. Each company must have at least 25 rifles. The remaining weapons may be bird guns, big swords, or locally made shotguns.

TABIE 3. ORGANIZATION OF AN INDEPENDENT GUERRILLA REGIMENT

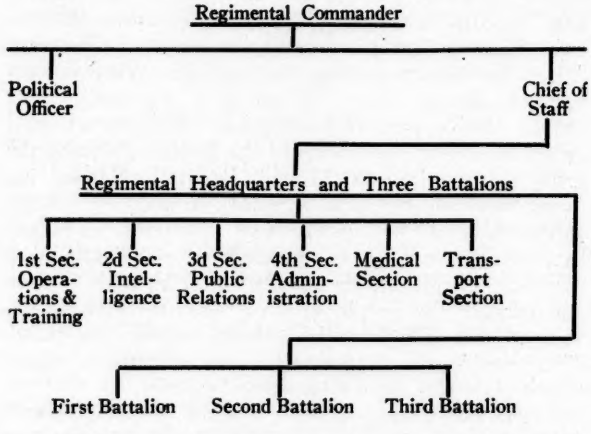


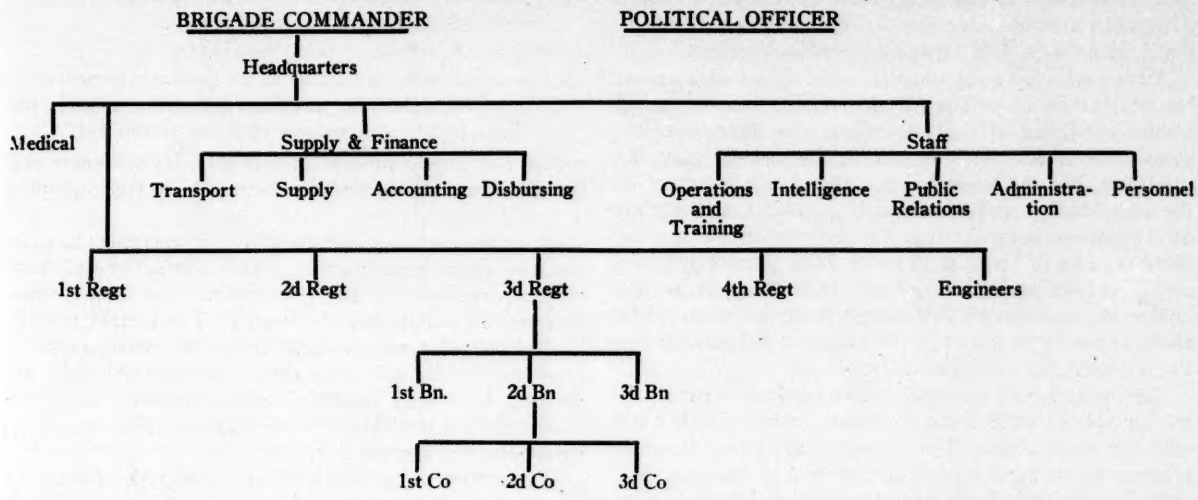

TABLE OF ORGANIZATION, GUERRILLA REGIMENT

| *Rank* | *Personnel* | *Arm* |
|---|---|---|
| Regimental Commander | 1 | Pistol |
| Political Officer | 1 | Pistol |
| Chief of Staff | 1 | Pistol |
| Operations Section | | |
| Operations Officer | 1 | Pistol |
| Clerks | – | — |
| Intelligence Section | | |
| Intelligence Officer | 1 | Pistol |
| Personnel | 36 | Pistols |
| Public Relations Section | | |
| Public Relations Officer | 1 | Pistol |
| Personnel | 36 | Carbines |
| Administrative Section | | |
| Administrative Officer | 1 | Pistol |
| Clerks | 15 | Pistol |
| Runner | 1 | — |
| Transport Section | | |
| Chief of Section | 1 | Pistol |
| Finance | 1 | — |
| Traffic Manager | 1 | Pistol |
| Supply | 1 | — |
| Drivers | 5 | — |
| Medical Section | | |
| Chief of Section | 1 | — |
| Doctors | 2 | — |
| Nurses | 15 | — |
| TOTAL, Regimental Headquarters | 137 | 60 Pistols<br>36 Carbines |
| Three Battalions | 1323 | 124 Pistols<br>900 Rifles |
| TOTAL | 1460 | 189 Pistols<br>936 Rifles |

NOTES

1. See Tables 1 and 2 for company and battalion organization.
2. Battalions and companies have no transport sections.
3. The hand weapon may be either revolver or pistol. Of these each battalion should have over 100.

TABLE 4. ORGANIZATION OF INDEPENDENT GUERRILLA BRIGADE (OR DIVISION)




## PART SIX

### THE POLITICAL PROBLEM OF GUERILLA WARFARE

In Part One I mentioned the fact that guerrilla troops should have a precise conception of the political goal of the struggle and the political organization to be used in attaining that goal. This means that both organization and discipline of guerrilla troops must be at a high level so that they can carry out the political activities which are the life of both the guerrilla armies and of revolutionary warfare. First of all political activities depend upon the indoctrination of both military and political leaders with the idea of anti-Japanism. Through them the idea is transmitted to the troops. One must not feel that he is anti-Japanese merely because he is a member of guerrilla unit. The anti-Japanese idea must be an ever present conviction and if it is forgotten we may succumb to the temptations of the enemy or be overcome with discouragements. In a war of long duration those whose conviction that the people must be emancipated is not deep rooted are likely to become shaken in their faith or actually revolt. Without the general education that enables everyone to understand our goal of driving out Japanese Imperialism and establishing a free and happy China the soldiers fight without conviction and lose their determination.

The political goal must be clearly and precisely indicated to inhabitants of guerrilla zones and their national consciousness awakened. Hence a concrete explanation of the political systems used is important not only to guerrilla troops but to all those who are concerned with the realization of our political goal. The Kuo Min Tang has issued a pamphlet entitled "System of National Organization for War" which should be widely distributed throughout guerrilla zones. If we lack national organization we will lack the essential unity that should exist between the soldiers and the people.

A study and comprehention of the political objectives of this war and of the anti-Japanese front is particularly important for officers of guerrilla troops. There are some militarists who say "We are not interested in politics but only in the profession of arms." It is vital that these simple minded militarists be made to realize the relationship that exists between politics and military affairs. Military action is a method used to attain a political goal. While military affairs and political affairs are not identical it is impossible to isolate one from the other.

It is to be hoped that the world is in the last era of strife. The vast majority of human beings have already prepared or are preparing to fight a war that will bring justice to the oppressed peoples of the world. No matter how long this war may last there is no doubt that it will be followed by an unprecendented epoch of peace. The war that we are fighting today for the emancipation of the Chinese is a part of the war for the freedom of all human beings and the independent, happy, and liberal China that we are fighting to establish will be a part of that new world order. A conception like this is difficult for the simple minded militarist to grasp and it must therefore be carefully explained to him.

There are three additional matters that must be considered under the broad question of political activities. These are, first, political activities as applied to the troops; second, as applied to the people, and third as applied to the enemy. The fundamental problems are: first, spiritual unification of officers and men within the army; second, spiritual unification of the army and the people, and last, destruction of the unity of the enemy. The

A SALUTATION TO THE SPLENDID HERITAGE OF THE UNITED STATES MARINE CORPS

SOLOMONS COMPANY

*Wholesale Drugs and Drug Sundries*

Savannah, Georgia

*Serving Since 1845.*



XUM

concrete methods for achieving these unities are discussed in detail in pamphlets Number 4 of this series entitled "Political activities in Anti-Japanese Guerrilla Warfare."

A revolutionary army must have discipline which must be established on a limited democratic basis. In all armies obedience of the subordinates to their superiors must be exacted. This is true in the case of guerrilla discipline, but the basis for guerrilla discipline must be the individual conscience. With guerrillas a discipline of compulsion is ineffective. In any revolutionary army there is unity of purpose as far as both officers and men are concerned and therefore within such an army discipline is self imposed. Although discipline in guerrilla ranks is not as severe as in the ranks of orthodox forces the necessity for discipline exists.

This must be self imposed, because only when it is, the soldier able to understand completely why he fights and why he must obey. This type of discipline becomes a tower of strength within the army and it is the only type that can truly harmonize the relationship that exists between officers and soldiers. In any system where discipline is externally imposed the relationship that exists between officer and man is characterized by indifference of the one to the other. The idea that officers can physically beat or severely tongue lash their men is a feudal one and is not in accord with the conception of a self imposed discipline. Discipline of the feudal type will destroy internal unity and fighting strength. A discipline self imposed is the primary characteristic of a democratic system in the army. A secondary characteristic is found in the degree of liberties accorded officers and soldiers. In a revolutionary army all individuals enjoy political liberty and the question for example, of the emancipation of the people, must not only be tolerated but discussed and propaganda encouraged. Further, in such an army the mode of living of the officers and the soldiers must not differ too much and this is particularly true in the case of guerrilla troops. Officers should live under the same conditions as their men for that is the only way in which they can gain from their men the admiration and confidence so vital in war. It is incorrect to hold to a theory of equality in all things but there must be equality of existence in accepting the hardships and dangers of war. Thus we may attain to the unification of the officer and soldier groups, a unity both horizontal within—within the group itself—and vertical, that is, from lower to higher echelons. It is only when such unity is present that units can be said to be powerful combat factors.

There is also a unity of spirit that should exist between troops and local inhabitants. The 8th Route Army put into practice a Code known as "The Three Rules and the Eight Remarks," which we list here:

Rules
1. All actions are subject to command.
2. Do not steal from the people.
3. Be neither selfish nor unjust.

Remarks
1. Replace the door when you leave the house.
2. Roll up the bedding on which you have slept.
3. Be courteous.
4. Be honest in your transactions.
5. Return what you borrow.
6. Replace what you break.
7. Do not bathe in the presence of women.
8. Do not, without authority, search the pocketbooks of those you arrest.

The Red Army adhered to this code for ten years and the 8th Route Army and other units have since adopted it.

Many people think it impossible for guerrillas to exist for long in the enemy's rear. Such a belief reveals lack of comprehension of the relationship that should exist between the people and the troops. The former may be likened to water and the latter to the fish who inhabit it. How may it be said that these two can not exist together? It is only undisciplined troops who made the people their enemies and who, like the fish out of its native element, can not live.

We further our mission of destroying the enemy by propagandizing his troops, by treating his captured soldiers with consideration, and by caring for those of his wounded who fall into our hands. If we fail in these respects we strengthen the solidarity of our enemy.

## PART SEVEN

### The Strategy of Guerrilla Resistance against Japan

It has been definitely decided that in the strategy of our war against Japan guerrilla strategy must be auxiliary to fundamental orthodox methods. If this were a small country guerrilla activities could be carried out close to the scene of operations of the regular army and directly complementary to them. In such a case there would be no question of guerrilla strategy as such. Nor would the question arise if our country were as strong as Russia for example and able speedily to eject an invader. The question exists because China, a weak country of vast size, has today progressed to the point where it has become possible to adopt the policy of a protracted war featured by guerrilla operations. Although these may at first glance seem to be abnormal or heterodox such is not actually the case.

Because Japanese military power is inadequate much of the territory her arms have overrun is without sufficient garrison troops. Under such circumstances the primary functions of guerrillas are three: first, to conduct a war on exterior lines, that is, in the rear of the enemy: secondly, to establish bases, and lastly, to extend the war areas. Thus guerrilla participation in the war is not merely a matter of purely local guerrilla tactics, but involves strategical considerations. Such war with its vast time and space factors establishes a new military process the focal point of which is China today. The Japanese are apparently attempting to recall a past that saw the Yuan extinguish the Sung and the Ch'ing conquer the Ming; that witnessed the extension of the English Empire to North America and India; that saw the Latins overrun Central and South America. As far as China today is concerned such dreams of conquest are fantastic and without reality. Today's China is better equipped than was China of yesterday and a new type of guerrilla hostilities is a part of that equipment. If our enemy fails to take these facts into consideration and makes too

optimistic an estimate of the situation he courts disaster.

2

Though the strategy of guerrilla is inseparable from war strategy as a whole the actual conduct of these hostilities differs from the conduct of orthodox operations. Each type of warfare has methods peculiar to itself and methods suitable to regular warfare can not be applied with success to the special situations that confront guerrillas.

3

Before we treat the practical aspects of guerrilla war it might be well to recall the fundamental axiom of combat on which all military action is based. This can be stated: "Conservation of one's own strength; destruction of enemy strength." A military policy based on this axiom is consonant with a national policy directed towards the erection of free and prosperous Chinese state and the destruction of Japanese imperialism. It is in furtherance of this policy that government applies its military strength. Is the sacrifice demanded by war in conflict with the idea of self preservation? Not at all. The sacrifices demanded are necessary both to destroy the enemy and to preserve ourselves; the sacrifice of a part of the people is necessary to preserve the whole. All the considerations of military action are derived from this axiom. Its application is as apparent in all tactical and strategical conceptions as it is in the simple case of the soldier who shoots at his enemy from a covered position.

4 & 5

All guerrilla units start from nothing and grow. What methods should we select to insure the conservation and development of our own strength and the destruction of that of the enemy? The assential requirements are the six listed below:

1. Retention of the initiative; alertness; carefully planned tactical attacks in a war of strategical defense; tactical speed in a war strategically protracted; tactical operations on exterior lines in a war conducted strategically protracted; tactical operations on exterior lines in a war conducted strategically on interior lines.
2. Conduct of operations to complement those of the regular army.
3. The establishment of bases.
4. A clear understanding of the relationship that exists between the attack and the defense.
5. The development of mobile operations.
6. Correct command.

The enemy, though numerically weak, is strong in the quality of his troops and their equipment; we on the other hand are strong numerically but weak as to quality. These considerations have been taken into account in the development of the policy of tactical offense, tactical speed, and tactical operations on exterior lines in a war which, strategically speaking, is defensive in character, protracted in nature, and conducted along interior lines. Our strategy is based on these conceptions and they must be kept in mind in the conduct of all operations.

Although the element of surprise is not absent in orthodox warfare there are fewer opportunities to apply it than there are during guerrilla hostilities. In the latter speed is essential. The movements of guerrilla troops must be secret and of supernatural rapidity; the enemy must be taken unaware and the action entered speedily. There can be no procrastination in the execution of plans; no assumption of a negative or passive defense; no great dispersion of forces in many local engagements. The basic method is the attack in a violent and deceptive form. While there may be cases where the attack will extend over a period of several days (if that length of time is necessary to annihilate an enemy group) it is more profitable to launch and push an attack with maximum speed. The tactics of defense have no place in the realm of guerrilla warfare. If a delaying action is necessary such places as defiles, river crossings and villages offer the most suitable conditions for it is in such places that the enemy's arrangements may be disrupted and he may be annihilated.

The enemy is much stronger than we are and it is true that we can hinder, distract, disperse and destroy him only if we disperse our own forces. Although guerrilla warfare is the warfare of such dispersed units it is sometimes desirable to concentrate to destroy an enemy. Thus the principle of concentration of force against a relatively weaker enemy is applicable to guerrilla warfare.

We can prolong this struggle and make of it a protracted war only by gaining positive and lightning-like tactical decisions; by employing our manpower in proper concentrations and dispersions, and by operating on exterior lines in order to surround and destroy our enemy. If we can not surround whole armies we can at least partially destroy them; if we can not kill the Japanese we can capture them. The total effect of many local successes will be to change the relative strengths of the opposing forces. The destruction of Japan's military power combined with the international sympathy for China's cause and the revolutionary tendencies evident in Japan will be sufficient to destroy Japanese Imperialism.

We will next discuss initiative, alertness, and the matter of careful planning. What is meant by initiative in warfare? In all battles and wars a struggle to gain and retain the initiative goes on between the opposing sides, for it is the side that holds the initiative that has liberty of action. When an army loses the initiative it loses its liberty; its role becomes passive; it faces the danger of defeat and destruction. It is more difficult to obtain the initiative when

**HIMMELEIN & BAILEY INC.**

**CAMDEN, N. J.**

✦

**LEATHER**



XUM

defending on interior lines than it is while attacking on exterior lines. This is what Japan is doing. There are, however, several weak points as far as Japan is concerned. One of these is lack of sufficient manpower for the task, another is her cruelty to the inhabitants of conquered areas, a third is the underestimation of Chinese strength which has resulted in the differences between military cliques which, in turn has been productive of many mistakes in the direction of her military forces. For instance, she has been gradually compelled to increase her manpower in China while, at the same time, the many arguments over plans of operations and disposition of troops have resulted in the loss of good opportunities for improvement of her strategical position. This explains the fact that although the Japanese are frequently able to surround large bodies of Chinese troops they have never yet been able to capture more than a few. The Japanese military machine is thus being weakened by insufficiency of manpower, inadequacy of resources, the barbarism of her troops and the general stupidity that has characterized the conduct of operations. Her offensive continues unabated but because of the weaknesses pointed out her attack must be limited in extent. She can never conquer China. The day will come, indeed, already has in some areas, when she will be forced into a passive role. When hostilities commenced China was passive but as we enter the second phase of the war we find ourselves pursuing a strategy of mobile warfare with both guerrillas and regulars operating on exterior lines. Thus with each passing day we seize some degree of initiative from the Japanese.

The matter of initiative is especially serious for guerrilla forces who must face critical situations unknown to regular troops. The superiority of the enemy and the lack of unity and experience within our own ranks may be cited. Guerrillas can however gain the initiative if they keep in mind the weak points of the enemy. Because of the enemy's insufficient manpower guerrillas can operate over vast territories; because he is a foreigner and a barbarian, guerrillas can gain the confidence of millions of their country men; because of the stupidity of enemy commanders guerrillas can make full use of their own cleverness. Both guerrillas and regulars must exploit these enemy weaknesses while, at the same time, our own are remedied. Some of our weaknesses are apparent only and are, in actuality, sources of strength. For example, the very fact that most guerrilla groups are small makes it desirable and advantageous for them to appear and disappear in the enemy's rear. With such activities the enemy is simply unable to cope. A similar liberty of action can rarely be obtained by orthodox forces.

When the enemy attacks the guerrillas with more than one column it is difficult for the latter to retain the initiative. Any error, no matter how slight, in the estimation of the situation is likely to result in forcing the guerrillas into a passive role. They will then find themselves unable to beat off the attacks of the enemy. It is apparent that we can gain and retain the initiative only by a correct estimation of the situation and a proper arrangement of all military and political factors. A too pessimistic estimate will operate to force us into a passive position with consequent loss of initiative; and overly optimistic estimate with its rash arrangement of factors will produce the same result.

No military leader is endowed by heaven with an ability to seize the initiative. It is the intelligent leader who does so after a careful study and estimate of the situation and arrangement of the military and political factors involved. When a guerrilla unit, due either to a poor estimate on the part of its leader or pressure from the enemy, is forced into a passive position its first duty is to extricate itself. No method can be prescribed for this as the method to be employed will in every case depend on the situation. One can, if necessary, run away. But there are times when the situation seems hopeless and in reality is not so at all. It is at such times that the good leader recognizes and seizes the moment when he can regain the lost initiative.

Let us revert to alertness. To conduct one's troops with alertness is an essential of guerrilla command. Leaders must realize that to operate alertly is the most important factor in gaining the initiative and vital in its effect on the relative situation which exists between our forces and those of the enemy. Guerrilla commanders adjust their operations to the enemy situation, to the terrain, and to prevailing local conditions. Leaders must be alert to sense changes in these factors and make necessary modifications in troop dispositions to accord with them. The leader must be like the fisherman who, with his nets, is able both to cast them and pull them out in awareness of the depth of the water, the strength of the current, or the presence of any obstructions that may foul them. As the fisherman controls his nets through the lead ropes so the guerrilla leader maintains contact with and control over his units. As the fisherman must change his position, so must the guerrilla commander. Dispersion, concentration, constant change of position—it is in these ways that guerrillas employ their strength. In general, guerrila units disperse to operate:

1. When the enemy is in over extended defense and sufficient force can not be concentrated against him guerrillas must disperse, harrass him and demoralize him.
2. When encircled by the enemy, guerrillas disperse to withdraw.
3. Disperse when the nature of the ground limits action.
4. Disperse when the availability of supplies limits action.
5. Disperse in order to promote mass movements over a wide area.

Regardless of the circumstances which prevail at the time of dispersal, caution must be exercised in certain matters:

1. A relatively large group should be retained as a central force. The remainder of the troops should not be divided into groups of absolutely equal size. In this way the leader is in a position to deal with any circumstances that may arise.
2. Each dispersed unit should have clear and definite responsibilities. Orders should specify a place to which to proceed, the time of proceeding, and the place, time, and method of assembly.



XUM

Guerrillas concentrate when the enemy is advancing upon them and there is opportunity to fall upon him and destroy him. Concentration may be desirable when the enemy is on the defensive and guerrillas wish to destroy isolated detachments in particular localities. By the term "concentrate" we do not mean the assembly of all man power but rather only that necessary for the task. The remaining guerrillas are assigned missions of hindering and delaying the enemy, of destroying isolated groups, or of conducting mass propaganda.

In addition to the dispersion and concentration of forces the leader must understand what is termed "alert shifting." When the enemy feels the danger of guerrillas he will generally send troops out to attack them. The guerrillas must consider the situation and decide at what time and at what place they wish to fight. If they find that they can not fight they must immediately shift. Then the enemy may be destroyed in detail. For example, after a guerrilla group has destroyed an enemy detachment at one place it may be shifted to another area to attack and destroy a second detachment. Sometimes it will not be profitable for a unit to become engaged in a certain area and in that case it must move immediately. When the situation is serious the guerrillas must move with the fluidity of water and the ease of the blowing wind. Their tactics must deceive, tempt, and confuse the enemy. They must lead the enemy to believe that they will attack him from the east and north and they must then strike him from the west and the south. They must strike, then rapidly disperse. They must move at night.

Guerrilla initiative is expressed in dispersion, concentration and the alert shifting of forces. If guerrillas are stupid and obstinate they will be led to passive positions and severely damaged. Skill in conducting guerrilla operations, however, lies not merely in the understanding of the things we have discussed but rather in their actual application on the field of battle. The quick intelligence that constantly watches the ever changing situation and is able to seize on the right moment for decisive action is found only in keen and thoughtful observers.

Careful planning is necessary if victory is to be won in guerrilla war and those who fight without method do not understand the nature of guerrilla action. A plan is necessary regardless of the size of the unit involved; a prudent plan is as necessary in the case of the squad as in the case of the regiment. The situation must be carefully studied, then an assignment of duties made. Plans must include both political and military instruction; the matter of supply and equipment, and the matter of cooperation with local civilians. Without a study of these factors it is impossible either to seize the initiative or to operate alertly. It is true that guerrillas can make only limited plans but even so the factors we have mentioned must be considered.

The initiative can only be secured and retained following a positive victory that results from attack. The attack must be made on guerrilla initiative; that is to say guerrillas must not permit themselves to be maneuvered into a position where they are robbed of initiative and where the decision to attack is forced upon them. Any victory which there is will result from careful planning and alert control. Even in defense all our efforts must be directed towards a resumption of the attack for it is only by attack that we can extinguish our enemies and preserve ourselves. A defense or a withdrawal is entirely useless as far as extinguishing our enemies is concerned and only of temporary value as far as the conservation of our forces is concerned. This principle is valid both for guerrillas and regular troops. The differences are of degree only; that is to say, in the manner of execution.

*7*

The relationship that exists between guerrillas and the orthodox forces is important and must be appreciated. Generally speaking, there are three types of cooperation between guerrillas and orthodox groups. These are:

1. Strategical cooperation.
2. Tactical cooperation
3. Battle cooperation.

Guerrillas who harass the enemy's rear installations and hinder his transport are weakening him and encouraging the national spirit of resistance. They are cooperating strategically. For example the guerrillas in Manchuria had no functions of strategical cooperation with orthodox forces until the war in China started. Since that time their function of strategical cooperation is evident, for if they can kill one enemy, make the enemy expend one round of ammunition, or hinder one enemy group in its advance southward, our powers of resistance here are proportionately increased. Such guerrilla action has a positive action on the enemy nation and on its troops while at the same time it encourages our own country men. Another example of strategical cooperation is furnished by the guerrillas who operate along the P'ing-Sui, P'ing-Han, Chin-P'u, T'ung-Pu and Cheng-T'ai railways. This cooperation began when the invader attacked, continued during the period when he held garrisoned cities in the areas and was intensified when our regular forces counter attacked, an effort to restore the lost territories.

As an example of tactical cooperation we may cite the operations at Hsing-K'ou when guerrilas both north and south of Yeh Men destroyed the T'ung-P'u railway and the motor roads near P'ing Hsing Pass and Yang Fang K'ou. A number of small operating bases were established and organized guerrilla action in Shansi complemented the activities of the regular forces both there and in the defense of Honan. Similarly, during the south Shantung campaign guerrillas in the five northern provinces cooperated with the army's operation on the Hsuchow front.

Guerrillas commanders in rear areas and those in command of regiments assigned to operate with orthodox units must cooperate in accordance with the situation. It is their function to determine weak points in the enemy dispositions, to harrass them, to disrupt their transport and to undermine their morale. If guerrilla action were independent the results to be obtained from tactical cooperation would be lost and those that result from strategical cooperation greatly diminished. In order to accomplish their mission and improve the degree



XUM

of cooperation guerrilla units must be equipped with some means of rapid communication. For this purpose two-way radio sets are recommended.

Guerrilla forces in the immediate battle area are responsible for close cooperation with regular forces. Their principal functions are to hinder enemy transport, to gather information and to act as outposts and sentinels. Even without precise instructions from the commander of the regular forces, these missions, as well as any others that contribute to the general success, should be assumed.

The problem of establishment of bases is of particular importance. This is so because this war is a cruel and protracted struggle. The lost territories can be restored only by a strategical counter attack and this we can not carry out until the enemy is well into China. Consequently some part of our country or indeed most of it may be captured by the enemy and become his rear area. It is our task to develop intensive guerrilla warfare over this vast area and convert the enemy's rear into an additional front. Thus the enemy will never be able to stop fighting. In order to subdue the occupied territory the enemy will have to become increasingly severe and oppressive.

A guerrilla base may be defined as an area, strategically located, in which the guerrillas can carry out their duties of training, self preservation and development. Ability to fight a war without a rear area is a fundamental characteristic of guerrilla action but this does not mean that guerrillas can exist and function over a long period of time without the development of base areas. History shows us many examples of peasant revolts that were unsuccessful and it is fanciful to believe that such movements, characterized by banditry and brigandage, could succeed in this area of improved communications and military equipment. Some guerrilla leaders seem to think that those qualities are present in today's movement and before such leaders can comprehend the importance of base areas in the long term war their minds must be disabused of this idea.

The subject of bases may be better understood if we consider:

1. The various categories of bases.
2. Guerrilla areas and base areas.
3. The establishment of bases.
4. The development of bases.

Guerrilla bases may be classified according to their location as, first, mountain bases; second, plains bases, and last river, lake and bay bases. The advantages of bases in mountainous areas are evident. Those which are now established are at Ch'ang P'o Shan, Wu T'ai Shan, T'ai Heng Shan, T'ai Shan, Yen Shan and Mao Shan. These bases are strongly protected. Similar bases should be established in all enemy rear areas. Plains country is generally not satisfactory for guerrilla operating bases, but this does not mean that guerrilla warfare can not flourish in such country or that bases can not be established there. The extent of guerrilla development in Hopei and west Shantung proves the opposite to be the case. Whether we can count on the use of these bases over long periods of time is questionable. We can, however, establish small bases of a seasonal or temporary nature. This we can do because our barbaric enemy simply does not have the manpower to occupy all the areas he has overrun and because the population of China is so numerous that a base can be established anywhere. Seasonal bases in plains country may be established in the winter when the rivers are frozen over, and in the summer when the crops are growing. Temporary bases may be established when the enemy is otherwise occupied. When the enemy advances the guerrillas who have established bases in the plains areas are the first to engage him. Upon their withdrawal into mountainous country they should leave behind them guerrilla groups dispersed over the entire area. Guerrillas shift from base to base on the theory that they must be one place one day and another place the next.

There are many historical examples of the establishment of bases in river, bay and lake country and this is one aspect of our activity that has so far received little attention. Red guerrillas held out for many years in the Hung Tzu Lake region. We should establish bases in the Hung Tzu and T'ai areas and along rivers and water courses in territory controlled by the enemy so as to deny him access to, and free use of, the water routes.

There is a difference between the terms base area and guerrilla area. An area completely surrounded by territory occupied by the enemy is a "base area." Wu T'ai Shan, T'ai Shan and T'ai Heng Shan are examples of base areas. On the other hand the area east and north of Wu T'ai Shan, (the Shansi-Hopei-Chahar border zone) is a guerrilla area. Such areas can be controlled by guerrillas only while they actually physically occupy them. Upon their departure control reverts to a puppet pro-Japanese government. East Hopei for example was at first a guerrilla area rather than a base area. A puppet government functioned there. Eventually the people organized and inspired by guerrillas from the Wu T'ai mountains, assisted in the transformation of this guerrilla area into a real base area. Such a task is extremely difficult for it is largely dependent upon the degree to which the people can be inspired. In certain garrisoned areas such as the cities and zones contiguous to the railroads the guerrillas are unable to drive the Japanese and puppets out. These areas remain guerrilla areas. At other times base areas might become guerrilla areas due either to our own mistakes or the activities of the enemy.

Obviously, in any given area in the war zone any one of three situations may develop; the area may remain in Chinese hands; it may be lost to the Japanese and puppets, or it may be divided between the combatants. Guerrilla leaders should endeavor to see that either the first or last of these situations is assured.

Another point essential in the establishment of bases is the cooperation that must exist between the armed guerrilla bands and the people. All our strength must be used to spread the doctrine of armed resistance to Japan; to arm the people; to organize self defense units, and to train guerrilla bands. This doctrine must be spread

among the people who must be organized into anti-Japanese groups. Their political instincts must be sharpened and their martial ardor increased. If the workers, the farmers, the lovers of liberty, the young men, the women, and the children are not organized they will never realize their own anti-Japanese power. Only the united strength of the people can eliminate traitors, recover the measure of political power that has been lost and conserve and improve that which we still retain.

We have already touched on geographic factors in our discussion of bases and we must also mention the economic aspects of the problem. What economic policy should be adopted? Any such policy must offer reasonable protection to commerce and business. We interpret "reasonable protection" to mean that people must contribute money in proportion to the money they have. Farmers will be required to furnish a certain share of their crops to guerrilla troops. Confiscation, except in the case of businesses run by traitors is prohibited.

Our activities must be extended over the entire periphery of the base area if we wish to attack the enemy's bases and thus strengthen and develop our own. This will afford us opportunity to organize, equip, and train the people, thus furthering guerrilla policy as well as the national policy of protracted war. At times we must emphasize the development and extension of base areas, at other times the organization, training, or equipment of the people.

Each guerrilla base will have its own peculiar problems of attack and defense. In general the enemy in an endeavour to consolidate his gains will attempt to extinguish guerrilla bases by despatching numerous bodies of troops over a number of different routes. This must be anticipated and the encirclement broken by counter attack. As such enemy columns are without reserves we should plan on using our main forces to attack one of them by surprise and devote our secondary effort to continual hindrance and harrassment. At the same time other forces isolate enemy garrison troops and operate on their lines of supply and communication. When one column has been disposed of we may turn our attention to one of the others. In a base area as large as Wu T'ai Shan, for example, there are four or five military subdivisions. Guerrillas in these must cooperate to form a primary force to counter attack the enemy or the area from which he came while a secondary force harrasses and hinders him.

After defeating the enemy in any area we must take advantage of the period he requires for reorganization to press home our attacks. We must not attack an objective we are not certain of winning. We must confine our operations to relatively small areas and destroy the enemy and traitors in those places. When the inhabitants have been inspired, new volunteers accepted, trained, equipped and organized, our operations may be extended to include cities and lines of communication not strongly held. We may at least hold these for temporary (if not for permanent) periods. All these are our duties in offensive strategy. Their object is to lengthen the period that the enemy must remain on the defensive. Then our military activities and our organization work among the masses of the people must be zealously expanded; and with equal zeal the strength of the enemy attacked and diminished. It is of great importance that guerrilla units be rested and instructed and during such times as the enemy is on the defensive the troops may get some rest and instruction may be carried out.

The development of mobile warfare is not only possible but essential. This is the case because our current war is a desperate and protracted struggle. If China were able to conquer the Japanese bandits speedily and to recover her lost territories there would be no question of long term war on a national scale. Hence there would be no question of the relation of guerrilla warfare and the war of movement. Exactly the opposite is actually the case. In order to insure the development of guerrilla hostilities into mobile warfare of orthodox nature both the quantity and quality of guerrilla troops must be improved. Primarily, more men must join the armies; then the quality of equipment and standards of training must be improved. Political training must be emphasized and our organization, the technique of handling our weapons, our tactics, all must be improved. Our internal discipline must be strengthened. The soldiers must be educated politically. There must be a gradual change from guerrilla formations to orthodox regimental organization. The necessary bureaus and staffs, both political and military must be provided. Attention at the same time must be paid to the creation of suitable supply, medical, and hygiene units. The standards of equipment must be raised and types of weapons increased. Communication equipment must not be forgotten. Orthodox standards of discipline must be established.

Because guerrilla formations act independently and because they are the most elementary of armed formations command can not be too lightly centralized. If it were guerrilla action would be too limited in scope. At the same time guerrilla activities to be most effective must be coordinated not only insofar as they themselves are concerned but additionally with regular troops operating in the same areas. This coordination is a function of the war zone commander and his staff. In guerrilla base areas the command must be centralized for strategical purposes and decentralized for tactical purposes. Centralized strategical command takes care of the general management of all guerrilla units, their coordination within war zones and the general policy regarding guerrilla base areas. Beyond this centralization of command will result in interference with subordinate units, as naturally, the tactics to apply to concrete situations can only be determined as these various situations arise. This is true in orthodox warfare when communications between lower and higher echelons break down. In a word, proper guerrilla policy will provide for unified strategy and independent activity.

Each guerrilla area is divided into districts and these in turn are divided into subdistricts. Each subdivision has its appointed commander, and while general, plans are made by higher commanders, the nature of actions is determined by inferior commanders. The former may suggest the nature of the action to be taken but can not define it. Thus inferior groups have more or less complete local control.



XUM

## GERMAN TRAFFIC AND MARCH DISCIPLINE

(*Continued from page* 9)

are headed in the same direction, whether they are marching or stopped, a third column should not be permitted to shove ahead or alongside. Such action leads to hopeless clogging. In all cases where general circumstances permit, it is advisable for the leader of the overtaking detachment to come to an understanding with the leader of the detachment he intends to overtake. The objection that valuable time would be lost is not tenable, for a clogged road would cause greater loss.

Congestions on the march cannot be entirely avoided, and time and again single units drift out of the column in order to pass ahead of troops at rest. Such procedure is both wrong and inadmissible. It almost necessarily leads to congestion, especially when a narrow pass, a road blockade, a shell crater, or a small bridge is reached. If a unit on the left side of the road approaches such a bottleneck, it cannot move ahead and it constitutes a disturbance and a nuisance. Neither does it reach its goal sooner than if it had remained in line. Apart from the fact that such action is prohibited by orders, judgment and consideration ought to lead to its elimination.

Drivers of single motor vehicles sometimes behave with particular lack of consideration. It is a matter of course that motor vehicles should overtake foot troops at a moderate rate of speed, and this necessity should frequently be called to the attention of all drivers.

Both horse-drawn and motor vehicles which are temporarily out of commission should be removed from the road. With use of good judgment, it will usually be possible to turn the vehicle into a side road—even a poor field road, if necessary—although the vehicle may have to be pushed by personnel. Repairs can thus be effected where other traffic is not interfered with. Calling the attention of all participants to this extremely important problem is essential for improving and keeping up good traffic discipline. Success frequently depends upon keeping the roads in good shape in all areas so that not only the troop itself, but also the supplies of all kinds may arrive on time and in good condition.

Training in march discipline is important in peacetime as well as in wartime, for bad peacetime habits exert a very positive influence upon wartime actions.

Every superior has not only the right, but also the clear duty to intervene where he is needed and to use his personality to prevent the clogging of roads or to bring about the necessary disentanglement. In such cases there can be no disputes about competency; he who is present is competent and responsible.

---

## ROYAL MARINES IN CRETE

(*Continued from page* 8)

the utmost difficulty and during the last two and a half days the force was on reduced rations and water.

It was unfortunate that the Royal Marines and Australians who held the rearguard positions to the end were unable to be re-embarked on the final night of the evacuation, but by their actions they enabled large numbers of British and Imperial troops to be successfully evacuated. This composite Royal Marine Battalion under the command of Major R. Garrett, consisted of the A.A. Searchlight Battery, parts of a heavy and light A.A. Battery, two coast Batteries and a number of signalmen. All these men had been trained in the use of a rifle and light machine gun and gave a good account of themselves as an improvised infantry battalion. A senior officer present remarked that "they were a tribute to the versatility of the Corps."

Thus ended the rearguard action in Crete, but not the adventures of all the officers and men who took part in it.

Major R. Garrett, Royal Marine, who had commanded the Battalion throughout, collected 140 men consisting of Royal Naval, Royal Marine, Australian and New Zealand personnel and put to sea in a broken down self propelled landing craft. The craft in question was flat bottomed with a capacity of a 100 men for short distances and capable of slow speed. This was reduced by the fact that one propeller was fouled by a wire. The vessel put to sea and after stopping at Podvopula, a small island some twenty miles to the South of Crete to clear the wire and fill any receptacle with water, Major Garrett and his ship's company proceeded.

After covering a further eighty miles petrol gave out. An attempt was made to run the engines on fuel supplied for cooking but this was unsuccessful. A jury mast was rigged and they made sail with blankets tied together with spunyarn. Under sail, the unwieldy craft proved difficult to steer and her head was only kept on her course by sending men over the side in relays to swim and push her in the required direction. Since it was now apparent that the journey would be a long one Major Garrett cut down supplies to one third of a pint of water, half a biscuit and a cube of bully beef a day.

The fuel that had failed in the engine now proved its use and enabled a distilling plant to be improvised. This consisted of two petrol tins connected with a rubber tube. On the eighth day two men died from drinking salt water. Finally after ten days at sea during which they had covered nearly 250 miles, landfall was made a few miles West of Sidi Barrani. Two Maoris on board found water and the party, thus refreshed, marched into the British lines.

The work of the Royal Marines in Crete was summed up by the Rt. Hon. A. V. Alexander, First Lord of the Admiralty in a speech on the 27th June, as follows:

"I shall not readily forget the thrill which I felt when the signal came from Crete and I knew that the Royal Marines had again been chosen for a part of great danger. Once again they had maintained the great traditions of the Corps. They displayed remarkable courage which enabled us to evacuate from Crete more troops than otherwise could have been done."



XUM

# Announcement of Association Regarding Awards for Prize Articles

| | |
|---|---|
| **First Prize** | **$50.00** |
| **Second Prize** | **$30.00** |
| **Third Prize** | **$20.00** |

THE ABOVE CASH PRIZES WILL BE PAID TO THE AUTHOR OF THE BEST ARTICLE ON A MARINE CORPS PROFESSIONAL TOPIC. SUBJECT TO BE SELECTED BY THE AUTHOR.

## Rules Governing Award of Prizes

THE competition is open to all Marine Corps officers (active, retired, reserve) who are members of the Association. Articles offered shall not exceed 5,000 words and must be typewritten, double-spaced, on 8 x 10½ paper. Illustrations, photographs or sketches may accompany the article. Each competitor will send in a sealed envelope the article plus one copy to the Editor, Marine Corps Gazette, Room 1728, Navy Building, Washington, D. C., before September 30, 1941. The article shall be signed by a *nom de plume*. By separate post in sealed envelope, the full name and rank of the writer, with the *nom de plume*, shall be sent in to the same address. In determining the standing of the articles submitted, preponderance of weight will be given to their professional value, originality of ideas and the practicability of the line of thought. Literary merit is of secondary importance.

The Board of Officers of the Association will act as the Board of Judges. Any or all articles submitted will be subject to publication, with honorable mention, in the Marine Corps Gazette at the usual rates. All manuscripts submitted will become the property of the Marine Corps Association. None will be returned.

★ *The November 1941 number of the Gazette will announce the results of the competition.*

XUM

Drop a line to
**CHESTERFIELD**
P. O. BOX 21
NEW YORK CITY
*for your copy of*
*TOBACCOLAND, U.S.A.*

Reading their copy are
FRED ASTAIRE
and RITA HAYWORTH
now starring in
"You'll Never Get Rich"
a Columbia picture

***Send for your free copy and see why***

# *It's Chesterfield*

***for a Cooler Milder Better-Tasting smoke***

Like millions who have read it, Chesterfield believes you too will enjoy **TOBACCOLAND, U. S. A.**... the only complete picture story telling you all about the making of a great cigarette.

**TOBACCOLAND** gives you all the interesting facts ...from the planting of fine cigarette tobaccos on through to the final stages of modern cigarette manufacture. *The more you know about cigarettes the more you'll enjoy Chesterfields.*

***Everywhere you go... it's have a Chesterfield*** *They Satisfy*

Copyright 1941, Liggett & Myers Tobacco Co.